



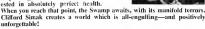
BABYLON IN THE SKY by Edmond Hamilton CHOCKY - a novelet by John Wyndham



## In a world gone medically mad, who

# could combat the PHYSICIAN TO THE UNIVERSE

You are plunged into a world peopled by robot-healers, where every illness can be cured and almost the greatest sin is to be sick. There exists only one greater sin: to be disinterested in absolutely perfect health.





PIII • Somewhere in the Amazon Basin the moonship had crashtried to find him. But—strange sights and sounds greeted him—a mad land filled with hermits, savages, sacred mounds, strange gods and weird scientific superstifions. A tale superbly told by J. G. Ballard, in "A Question of Re-Entry."

You'll uncover new worlds in March Fantastic. On sale February 19th.

Still 35⊄

AMAZING STORIES, Fact and Science Fiction, Vol. 37, No. 3, March, 1963, is published monthly by Ziff-Davis Publishing Company, at 434 South Wabash Avenue, Chicago 5, Illinais. Subscription rates: One year United States and possessions 33.50; Canada and Pan American Union Countries \$4.00; all other fareign countries \$4.50. Second Class postage poid at Chicago, Illinais and ar additional molillos affices.



# The Unpublished Facts of Life

THERE are some things that cannot be generally told - things you ought to know. Great truths are dangerous to some-but factors for personal power and accomplishment in the hands of those who understand them. Behind the tales of the miracles and mysteries of the ancients, lie centuries of their secret probing into nature's lawstheir amazing discoveries of the hidden processes of man's mind, and the mastery of life's problems. Once shrouded in mystery to avoid their destruction by mass fear and ignorance, these facts remain a useful heritage for the thousands of men and women who privately use them in their homes today.

Secrets entrusted to a few

THIS FREE BOOK

The Rosicrucians (not a religious

The Rosicrucians (AMORC)

. VIM

organization) an age-old brotherhood of learning, have preserved this secret wisdom in their archives for centurics. They now invite you to share the practical helpfulness of their teachings, Write today for a free copy of the book, "The Mastery of Life." Within its pages may lie a new life of opportunity for you. Address: Scribe VIM SEND THIS COUPON --

he ROSICRUCIANS (AMORC) an Jose, California
ease send me the free book, The Mastery Life, which explains how I may learn to se my faculties and powers of mind.
ame
ddress
i <del>n</del>

REG. U. S. PAT. OFF.

FIRST IN SCIENCE FICTION SINCE 19	
NOVELET Very 9 60	
HOCKY	++-
by John Wyndhom	35
SHORT STORIES	
ABYLON IN THE SKY	-
By Edmond Homilton	6
UPITER FOUND	ofen
By Robert F. Young	22
HE BORGIA HAND	
By Roger Zelozny	73
HE WALLS	
By Keith Loumer	77
HE SHERRINGTON THEORY	
By J. G. Bollord	102
TAR CHAMBER	
By H. B. Fyfe	114
FACT	
NTELLIGENT LIFE IN SPACE	
By Ben Bovo	91
FEATURES	
DITORIAL	5
OMING NEXT MONTH	76
HE SPECTROSCOPE	123
OR SO YOU SAY	
Cover: Lloyd Birminghom	
Illustrating Bobylon in the Sky	

SUBSCHIPTION SERVICE: All subscription correspondence should be addressed to AMAZING STORIES, Circulation Decartment, 634 Booth Wabsah Arcson, Circulation Decartment, 634 Booth Wabsah Arcson, 634 Booth Wabsah Wabsah

ZIFP-DAVIS PUBLISHING COMPANY
William B. Ziff, Chaiman of the Board
(1987-1983)
William Ziff, President
W. Bradferd Briggs, Executive Vice
President
Herine B. Sarbin, Vice President and
General Manager
M. T. Huminsham, Jr., Vice President

M. T. Birmingham, Jr., Vice President and Treasurer Rebert P. Breeding, Circulation Director Charles Heusman, Financial Vice President

Stanley B. Greenfield, Vice President

Editoriol Director

NORMAN M. LORSENZ

Editor

CELE GOLDSMITH

Ziff-Davis Publishing Company Editorial and Executive Offices One Park Avenue New York 15, New York O Repen 9-7200 Advertishing Manager Martin Gluckman

Midwestern and Circulation Office 454 South Wabash Avenue Chicage 5, Illineie WAbash 2-4911

Western Office 9025 Wilshire Beulevard Beverly Hills, California CRestview 4-0265



Copyright © 1963 by Ziff-Dovis Publishing Compony. All rights reserved.



THERE may be fewer sciencefiction and fantasy magazines
on the newstands as time goes
by; there may be nothing but
trash in the side movies; there may
be nothing but hollowed-out retreads of plots on the side television screen. But do not let any of
this deter you from thinking that
the genre still exerts a compulsion.

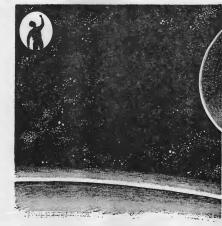
To wit, the aficionado of the macabre and the science-fictional may be happy to know that he need no longer read or look at his harmless addiction. He can now instead to the need no longer read or look at his harmless addiction. He can now specializing in spoken recordings are now putting out discs of faratey and st. This may be most affected by the seemed to us that many of our readers would be interested to know that the following items are now available:

Egar Allan Poe's The Pit and the Pendulum; Poe's The Imp of the Perverse, Shadow and Lionizing (all on one record). The former is read by Broadway actor Alexander Scourby, and the latter by Hollywood star James Mason. Burgess Meredith is the reader of a new Ray Bradbury record, which includes such classic tales as There Will Come Soft Rains, and Marionettes, Inc.

The apotheosis of H. P. Lovecraft continues with a record, narrated by actor Roddy Mc-Dowall, of The Master's horror stories: The Outsider, and The Hound. And, finally, there is a way-out item called Drop Dead, in which Arch Oboler suggests seven different methods of scaring people to death.

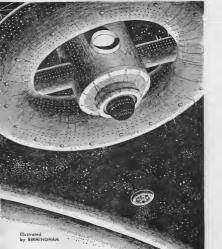
The fact that we're telling you about all this competition does not mean we've lost our marbles. It means that we think that, after all, the best way to get your science-fiction is the old way—to sit down of an evening and read it.

H UGO GERNSBACK, founder of Amazing Stories, reacting to a recent suggestion that a new name is needed for "science fiction"—a term he originated—eame up with these: predifiction; prophiction; futufiction; telefiction. Any of them do anything to you?—NL



The monstrous cities orbiting overhead mocked the earthbound humans. Hobie wanted to reach out there and pull one down and smash it.

# **BABYLON IN**



By EDMOND HAMILTON

THE SKY

SAM MACKLIN walked through between the parked cars. Hobie came behind him, tall, gangling, and proud.

"There's a big crowd, Pa."
"Well, it's been a hot day, over a hundred. Maybe they come to get cool."

"No, sir, they come to hear you. They always come to hear you."

"They do seem to, for a fact." Sam Macklin nodded his head and smiled. "Guess if you tell 'em what they want to hear, they'll come to hear it. And Hobie, I ain't going to send 'em home empty."

The cars up in front had their lights on so that the blunt bare tip of the headland was like a stage, with the black sky over it and the dark Pacific beyond it for a backdrop. People were sitting on the rocks, on the patches of coarse grass, on the roofs and hoods and fenders of the cars. Somebody said, "Here he is, here's Sam!" The crowd began to vell, "Hey Sam, give 'em hell, Sam, we're with you, Sam," Macklin was swallowed up in a mass of welcoming arms and patting hands. Hobie lost him but he was used to that and didn't mind. It was part of the pride. He made his way around behind the jostling backs, feeling a queer tight thrill in him at the sound of the women's voices, the way they screamed Sam! Sam! into the cool sea wind. Pretty soon he could see his father again. He was waving and chaffering with the crowd. He wore a white shirt that set off his brown, sinewed arms and long powerful neck. He was a rangy man, gaunt-faced, with a big nose and jaw and blue eves that looked as though they could pierce through steel. He turned toward the crowd and they melted back until he was standing by himself on the narrow end of the headland, with the lights on him and nothing but the black night beyond. Hobie found a rock and sat on it, one long leg hanging straight over the drop, a hundred feet down to where pale surf breathed on a little beach.

THE crowd fell quiet. Hobie bit

"Now," and Macklin quietly, "you all know what I come to talk about. "His voice was harsh and deep and far-carrying. Those in the farthest ends of the crowd heard and answered. "I always talk about the same thing, because it seems to me there ain't anything else important in the world to talk about, and that's us —you and me, our wives and families, and what's becoming of us, and why."

Again the crowd growled and

muttered.

"This ain't the first time in history," said Sam Macklin, "that men have forsook justice and

gone following after strange gods and left the righteous behind to suffer, until . ." He paused, and there was an indrawn breath, and somewhere a seabird cried. Macklin leaned forward, as though to make his oneness with the crowd more definite. "Until, my friends, they're pulled down from their high place, and trampled, and then in that day the righteous are succored and lifted up."

Hobic watched the crowd. It was like they were one body, a lot of arms and legs but only one body, and no head. His father was the head. His father was the head see their faces in the headlights, and it seemed they were watching their own thoughts come out of Sam Macklin's mouth, and stand before them clearer and sharper than they had ever seen them before. "They moved on," Macklin was "The

saying. "They builded them cities, not on the good solid Earth
because that wasn't good enough
for them any longer, but right up
in heaven, to fly back and forth
with their mocking luxuries and
fornications..."

And even the names they gave the cities, Hobie thought, were mockeries too. Nineveh and Tyre. Valhalla. Carthage and Cibola and Camelot, Lyonesse and— Babylon. "... and Babylon. That great

. . . and Dabyion 1

city! But we were left behind. And why? Because we weren't good enough. Because we don't worship the right goods, the good of the machines that can't make a mistake. Because we don't speak the right language and don't have a lot of fancy letters after our names. I know! I'm not Sam Macklin, A.B. I'm something better. I'm Sam Macklin, Human Being, and I'm proud of it . . . "A roar went up from the crow."

and the women shrilled. The soft sea wind lifted the hair on Hobie's head and set the roots of it to prickling. Now over one shoulder he cast a furtive glance at the dark sky.

"... human beings, every one

". . . human beings, every one of us. And why have we been pushed aside like dirt, living on the crumbs they're good enough to throw us? Can you answer me that?"

"Tell us, Sam!"

"I'll tell you. It's because God only helps them that has the guts to help themselves. Like we're going to help ourselves, finally! We still got the ballot. We can still elect men to talk for us . . ."

"Sam! Sam! Sam!"
"That's up to you, But if it's

me, or if it's somebody else, someday, no matter how long it takes us . . ."

He turned away from the crowd and stretched his head up and he seemed to grow tall against the stars, taller than any human man. Hobie stopped breathing. There was a sudden hard silence.

hard silence.

In the middle of the silence
Sam Macklin said aloud, "We

Sam Macklin said aloud, "We won't never get our jobs back, we won't never be men again, until we do it, until we reach out up there with our hands . . ."

A star shot swift and brilliant out of the deep west. "... and pull you down!"

Sam Macklin cried. "You, Babylon! You the great city! You up there mocking us! We'll pull you down—you and all your sistercities!"

HIS hands reached high, grasping for the shooting star. Hobie thought for one reeling moment that he had caught it. But the star passed on, tantalizing, scornful, arrogant, leaving Sam Macklin and his son and all the others stranded on their promontory, howling their anger and their hurt. And the shame of that stranding was so great that Hobie wept with it, standing silent in the edge of the crowd, with the tears on his cheeks and his fists closed hard.

Then he ran. He stumbled into the car and sat alone, dazed and sick with the glitter of that manmade star.

After a while Sam Macklin got in and drove away.

"How long will it take. Pa?"

10

Hobie asked. "To pull them down."

Sam Macklin talked about elections and speeches and the making of laws.

Hobie said, "Too long."

The cool salt smell went out of the air. Dust came into it, the remains of the day's heat, the dry sweetness of sunburned grass. The car left the highway for a maze of dark streets that swirled around the curving sides of low hills. The pavement, endlessly patched, made the tires slap and jar. Hobie stared at the sky and did not speak.

The Macklin house was eightyfour years old. The ornamental plank front was painted blue, the stucco sides white, both of them bleached by sun and stained by winter rains, the stucco showing irregular blotches where repairs had been made. Inside there was a faint odor of decaying plaster. The floors had sunk. The pink ceramic tile in the bathroom was jagged all over with cracks, and in the kitchen the built-in oven tilted so that pans put into it all slid to one side. The TV had been cockeved so long that now a level one looked strange to them.

Hobie went down the narrow hall to the room he shared with his two smaller brothers. Joanie Ann rated a room to herself because she was a girl and Hobie envied her, even though the converted den wasn't much bigger than you needed to turn around in. It seemed like he never had a minute alone, a minute to just be quiet and think. Even now the kids were snoring and snuffling. making noise. Hobie did not feel like sleeping. There was a sickness in the pit of his stomach that would not let him rest. He lay on his bed for a few minutes and then he crept out again, clear outside into the patio at the back of the house. He sat in an old chair by the barbecue, and stared at the sky, and stared and trembled, and thought how his father's hands had reached up for the fleeing impudent star and seemed to eatch it.

He saw quite clearly what he had to do. He had known, he guessed, for a long time, ever since he left school or even before that, but he hadn't been ready and so he had left the thought alone, to lie still and grow. Now he was ready.

HE did not take anything with him. There was nothing to take except his winter jacket and he was not going to need that. The little money he knew his mother had saved wouldn't help him even if he wanted to steal it, and he couldn't get it out of the back of the bureau drawer without waking her and Pa. All Hoble did was walk to the back door and put his hand on the wall beside it for a minute. Then he went away.

He walked steadily, through the rest of the night and into the first light of morning. Just before the sun came up he saw the star again, travelling high and serene from west to east. He had been seeing it all his life. Some of the other cities were visible from time to time, but the orbit of Babylon was such that it was most often in the sky. Hobie watched it. "You robbed me." he whispered to it, with the intimacy of hate. As an afterthought he added, "Not just me, you robbed us all."

He walked on through the broad cracked streets, past the endless rows of small flat houses with their raddled fronts and crumbling patios, houses with all the infirmities of age but none of the dignity. They were made to be young and have fun, and now that day was gone. The families that lived in them were like Sam Macklin's family, subsisting partly on doles, partly on made work. rarely on the honest jobs that came usually with some kind of an emergency, where old-fashioned human labor was better than machines. "All of us!" thought Hobie, and, driven by firm resolution he strode faster on his long brown legs.

It was mid-morning, and blistering hot, when he reached the highway and got a lift on a local truck, heading north. THE skyscrapers rose in a wall along the curving shore of the bay, Beyond them there were mountains, but Hobie could not see them except for an occasional glimpse when one of the broad avenues happened to open up a vista. People lived and worked and bred and died in this complex of stone and plastic, glass and metal. They never even had to go out of their buildings unless they wanted to for the fun of it. These people had money and they had real jobs, and Hobie's people envied them, but not viciously, They were Earthbound too, and they were needed. They kept things running, the daily-life matters of food and utilities and business. Hobie had been here before. He was used to flat little houses in little vards, and he felt closed in here. The tallness of the buildings did not impress him. When he thought what it must be like to live in one of these high crystal eyries overlooking the sea, all he could think of was how much higher were the roofs of Babylon.

The spaceport was at the very edge of the water, huge and round like a gigantic drumhead set down in the midst of the skyscrapers, with one tall pylon that towered over all the other towers as a man stands among children. It was getting on for evening when Hobie reached it. He was tired and very hungry, but he did not mind that. He rode up the moving spiral stair to the visitors' level of the pylon and looked out over the landing field. Gracetal and silent as birds, the great ships rode the sunset down, or lifted up in glorious soaring area toward the beaconing of the first stars. Since the development of the anti-grav field there had been no more use for rockets. The dramatics of flame and thunder and uncertainty had given way to a calm and quiet strength.

The strength that held up the cities.

In the days of Hobie's grandfather the cities had used to land here for servicing and supplies. But they were little then. They were experimental stations, and observatories, and research labs, and nobody had realized what they were going to be later. Now the cities rarely landed, finding it easier to use tenders. And they're afraid, Hobie thought, of what people might do to them if they let themselves get caught on the ground.

He found the passenger gate for the Babylon tender, and saw that he had six minutes less than an hour in which to figure out a way to get on it.

It did not take half that long.

THE freight loading ramps
were on the level below, and
Hobic could see that the open
lower batches of the tender were

about with apparent carelessness among the throngs of sightseers, Hobie located the rear precincts of the pylon which were reserved for spaceport personnel. He managed to slip unnoticed through the fire-door, into a service corridor. Twice he was almost, but not quite, caught as people went by. The second time he took refuge in a room where various sorts of cleaning apparatus were stored. He found one ordinary portable vacuum, picked it up and walked out with it. He walked to the service stair and rode down, and no one paid any attention to him. The freight level was hugely noisy. Elevators, sorters, lifters, shunters and conveyor belts slapped and banged, clanked and rattled, chuffed and wheezed and squealed. The streams of boxes and crates and packages were dizzying, going every whichway and never stopping. Making his face as blank and stupid as he could. Hobie edged around the walls. There were some men on the floor, superintending the machines, but they were busy and they did not at first notice Hobie, who was fairly well hidden by the moving belts. Hobie was looking for his gate number. He found it. It was divided into two sections. A conveyor belt passed through the larger one. The smaller one, marked PERISHABLE, had no conveyor belt. Half a dozen motor-

already receiving cargo, Gawking

ized carriers were lined up beside it, loaded with foods, drugs and liquids that couldn't stand freezing or vacuum. Hobie smiled. This was what he had been looking for. He knew all about the cities and the way they were supplied and guarded and cared for. There wasn't much he didn't know about the cities.

A man's voice said behind him, "What are you doing here?"

Hobie's guts contracted with a sharp pain. But he made himself turn and say repreachfully, "Nothing, man." He indicated the vacuum cleaner. "I'm supposed to take this for fixing." "Well, take it, then," the man said. "Don't hang around here." Hobie's eyes were shallow and

ingenuous as a flounder's. "I was just looking."

"Look someplace else. You know what'll happen if you get yourself cought in the maching

know what'll happen if you get yourself caught in the machinery?"
"What?"

"The whole goddam space-

port'll be shut down for two hours while we dig out the pieces. Go on, git."

Hobic slouched away. When he glanced back the man had disappeared. Hobic looked all around. He was afraid to take the chance because he would only have one, but waiting wasn't going to help either. His heart pounded and he could taste the sweat that was coming on his face. Suddenly he

tossed the vacuum cleaner on the belt that rumbled and thumped beside him, and he ran, fast and light-footed in his canvas shoes, and jumped onto one of the carriers and burrowed and folded himself down small amid the sacks and hoves A half hour later, in the close

dark of a warmed and pressurized hold. Hobie rose toward the orbit of the city of Babylon. He wondered who would get

the vacuum cleaner.

HOBIE stood in a crystal pod with nothing under his feet or over his head, so that he seemed to be standing in the middle of the sky. If he looked up, or ahead, or on either side, he saw black immensity hung with stars, and the stars had depth to them, and they burned the way stars ought to, hot and glorious and in many colors, and not as he had always seen them like lights pasted on a flat surface, and even then they took your breath away. If he looked down he saw the

Earth, round and rolling beneath his feet. The night was sliding away from him. The golden sickle edge of morning bent across the world and suddenly the tremendous sun-blast hit him, a crash of light that made him cringe and cower. He thought for a moment that it had killed him, but some automatic shielding protected the pod. He could endure the light.

He could see clouds flash burnished silver above the blue of an ocean. There were more clouds. and then a continent began to emerge in shades of green and brown, very misty and oddly unreal. Hobie tried to decide what continent it was, matching the shape he saw with the few maps he could remember from school. Europe, he thought, and the Atlantic, but he was not sure, and this brought a flush of rage over his awe and spoiled it.

He remembered why he was here

He turned around to leave the pod, and there was a girl stand-

ing and watching him. "It did that to me, too," she said, "the first time I saw it."

"Did what?" asked Hobie.

"Sort of doubled me up." She smiled. She was pretty, in a firm, clear-cut way. She wore a dark skirt and sandals and a white shirt, all very clean and trim. Her hair was only a little bit curly. dark brown with lighter places where the sun caught in it. Hobie hated her. And he was terribly afraid.

She was looking at his clothes. the sun-faded shorts and gaudy shirt. "You must be awfully new here."

"I am." He wanted to run but he didn't dare.

"Who are you studying with?" "I'm sorry." Hobie said. "I have to go." He stood up tall and walked past her, making himself not hurry.

"Don't go to your first class like that," she said. "Go up to Three and show your card. They'll take care of you."

She meant it kindly. Hobbe did not thank her. He strode away, into the corridor that served as a street. At the first possible moment he turned into a connecting corridor out of her sight. And now he hurried. He had already been far luckier than he deserved. Pa would say it was because right was riding with him, and he believed that. Only it seemed ungrateful to push things too far.

THERE were close to two thousand people in Babylon, enough
for a stranger to get by in for a
while. Sooner or later, though,
someone would start asking him
questions, someone he couldn't
walk away from as easily as he
had the girl.
There wasn't any reason to

wait. There hadn't been any reason to wait even this hour or two, except that he wanted to see a little of the city so he could enjoy more thoroughly what he was doing.

This was a residential level. The blocks of apartments ran around the ovoid circumference of the city, so that at least one room could look out over the clouds and the rolling Earth. The inner area was divided up into

community rooms, a theatre, recreation centers, a playground and school for the small children. Hobie looked for the luxuries and the whoredoms that Pa had talked about. They must be on another level, because all he saw here was people, mostly women and kids. going about the business of daily living, and what he could glimpse of the apartments through an occasional open door, or see of the community rooms, was clean and attractive, better than what Hobie's people had, but not nearly as fancy as the skyscrapers back down on Earth.

He looked at the women and kids, and for a moment he got sick and weak at the thought of what he was going to do. But he hardened his heart. The innocent sometimes had to suffer with the guilty. He thought of Pa and all the other men like him, and of himself and his kid brothers and Joanie Ann, robbed of their birthright, dragging their lives out on doles and sufferance, because of these people, and the people like them on the other cities. He went on. And twice, as he crossed connecting corridors, he thought he saw at a distance the flicker of a white shirt. Each time he stopped and looked, and thought he must have been mistaken.

He found the lift that had brought him from the big lockchamber where the tender docked. He got into it and pushed the button for the topmost level. Strangely, now that he was on the last step of his journey, he felt calm and steady. In the tender, hold he had broken into some of the food packages and stayed his hunger, and there had even been time to sleep. So he was in good shape for what he was about to do.

The highest level of Babylon was domed with the same crystal as the observation pod. It was flooded with the raw blaze of the Sun. Here there were nothing but laboratories and observatories and barred doors that said DAN-GER UNSHIELDED AREA BEYOND, OF DANGER VACUUM CHAMBER, Or STERILE AREA AUTHORIZED PER-SONS ONLY. Through glass-walled partitions Hobie could see rooms full of all kinds of things he did not understand. Men and women and young people like himself. dressed in white smocks or in protective clothing, went about their incomprehensible work. Evil work. Pa said, taking the bread out of honest men's mouths with their fine new ways of doing things, spending millions of dollars fooling around with a lot of stuff that sounded big and important but never came to anything you could buy, sell, or eat. A lot of it came to nothing at all, and was a wicked waste when there were people needing things. Hobie went furtively along the corridors, peering with a ferce and terrible pride through the partitions at the people who did not know that he was there, and he felt that he was not himself now, Hobie Macklin, but he was all the men and women and kids he knew rolled together, rising up and smitting in their just wrath. He felt ennobled. He felt as glorious and as powerful as God.

He found a door that said POW-ER PLANT KEEP OUT AUTHORIZED PERSONNEL ONLY

He went through it.

A BOVE the clear dome great golden vanes extended to trap the sunlight and draw power from it, sucking it down into giant batteries that fed the city the anti-graw field, the pumping systems, the light and air and heat. All of this apparatus occupied about three-fourths of the space in the large steel-floored room, enormous shapes of dull metal and plastic that dwarfed the men who tended them. The other fourth of the room was taken up by a monstrous control-panel.

Men walked up and down, or sat in metal chairs, in front of this panel, watching the thousand dials and ten thousand lights on it, keeping the city alive. They turned around when the door opened. They looked at Hobie. There were five of them, two walking, three sitting, and there were two empty, strong, heavy chairs. Hobie ran toward the control panel. He moved as he had sometimes moved in dreams, light and rushing, powerful, resistless. The faces of the men regarded him in startled wonder. He smiled and reached out his hands toward the nearest chair, to lift and smash and crumple. "And mighty", he thought, "mighty was the fall thereof."

There was no warning at all. The flash and the hammer stroke came together, out of nowhere, into Hobie's brain. In one split second he simply stopped being.

\* \* \*

The girl was looking at him.
"It was something about his
eyes," she said. "I just had to
follow him. I thought I might help
him... Then I saw that he
wasn't going to Three, or the
classrooms, and I thought that
I'd better tell you."

There were three men in the room, beside the girl. They looked down at Hobie, their faces frowning and concerned. The room was very small, antiseptically light and uncluttered. Hobie lay in a bed. On his left hand the wall beside the bed was made of crystal. He could easily look out through it and see the shadow of Babylon laid sharp and black across the blaze of the Sun, reaching down like a long finger toward the silver-blue edge of the Earth. "That wasn't fair," said Hobie.

BABYLON IN THE SKY

One of the men touched the girl on the shoulder and smiled. "Thanks, Ellen. You can go along

to your class now."

The girl nodded. She looked again at Hobie. It seemed to him that she wanted very much to say something, but she turned away and went out. The man leaned over the foot of the bed. He was short and rather slight in build. Hobie knew that he would tower over him if he was standing, and that was the only advantage he would have. This man was strong to lead, like Pa, only in a different way.

"All right, now Hobie," said the man. "What wasn't fair?"

"I thought I knew everything about the cities. You kept a few things hid." He still felt strange and sluggish in his body and his mind was dulled, so that it took him a minute or two to realize that he was alive, whole, a captive, and that there was no doubt at all what he had been trying to do.

Oddly, he didn't seem to feel disappointed that he had not been able to do it.

He looked at the man. "Why didn't you kill me?" "There wasn't any need to.

And we keep a few things hid, as you say, for our own protection. My name is Todd, I'm responsible for security." He motioned first to the man on his right, and then to the one on his left. "This is

Mr. Chowdhury, our coordinator—you might say our mayor—and
Mr. Lecayo." He did not explain
who Mr. Lecayo was. He held up
a card that Hobie recognized as
his own ID for job line-ups and
the distribution of surplus foods.
"Gentlemen," said Todd, "this

is Hobie Macklin, Sam Macklin's son."

Hobie was startled. "You mean

you know about Pa? I didn't

"We know about him," said Mr. Lecayo. He shook his head. "Your father is shaping into one of the most alarming rabble-rousers we've had after us yet."

"Rabble-rouser," said Hobie. He thrust himself upon the bed,

"My father . . ."
"Did he send you?" asked Todd

quietly.

"No," said Hobie. He began to be alarmed. "No, sir, he didn't.

This was my own idea."
"Why did you want to do it?"
"Because Pa's way is too slow.
He's all for laws and talking. I couldn't wait." He looked at them
bitterly. "But you even robbed me

of that."

HOW old are you, Hobie? asked
Lecayo.

"I'll be eighteen next month."
"How much schooling have you had?"

"Eighth grade."

"You're proud of that."
"Sure. That's all anybody

needs. I can remember when there was some high-schoolers in the neighborhood. Not for a long time, though."

"Rough on them, was it?"

"Rough," said Hobie, "It sure

was. Finally the old high-school got turned into a hospital. See, we don't have our heads in the clouds, Mr. Lecayo. We like things to be some real use to somebody."

"Did you have much trouble, Hobie?"

"Trouble?"

"It must have been difficult to hide."

"Hide what?"

"The fact that you're a highly intelligent boy."

Hoble's heart began to beat fast. Sweat broke out on him. He looked away from Lecayo and said rapidly, angrily. "Sure I am. That's what Pa's doing his 'rabble-rousing' about. We're just as good as you are. We've got a right to jobs, good jobs. We've got a right..."

"And you were afraid to go past the eighth grade."

Hobic stared blindly through the glass wall, remembering things he did not want to remember. Remembering two different times, once in the fifth grade, once in the seventh, when the other kids had beat up on him for being a smarty so-and-so. Remembering how he himself had joined a snarling, sneering, jeering little mob to chivwy another boy who was a damned know-itall. His mouth was dry. "Pa says . . ."

Chowdhury's voice was gentle. "Pa says it's all our fault, and if the cities were abolished, everything would be fine."

"You took our jobs away, with the machines and things you thought up. You made yourselves better than us. You sit up here ..." Hobie had been going to talk about the luxuries and whoredoms, but now the words seemed unreal and refused to come out.

"The cities have become symbols of all your frustrations." Lecayo asid. "Actually, they're what they always were, centers of learning. They've grown bigger and they've changed, that's all. We can do research her that can't be done on the ground, and the climate is friendlier. We feel freer."

"You took our jobs away," said Hobie stubbornly. "We'll never get 'em back, we'll never be men again until . . ."

"You want a job," said Chowdhury. "What can you do? Swing- a hoe? A pick and shove? O perate a simple machine?" He shook his head. "Your people are a luxury, Hobie, like the horse. Our researches find new and cheaper ways to produce the necessities of life, so that the country can afford to keep you reasonably did fed and clothed and housed. And instead of doing what you can do to help yourselves, you rivet your status more firmly around your necks every year."

The mild gentle voice suddenly had a note of startling anger in it.

"Nothing can be done about the genuinely stupid. In all ages and times they suffer, and I suppose they can't be blamed for making a virtue out of stupidity since they're stuck with it anyway. But your father and the others like him who are perfectly capable of learning, and who refuse to learn out of laziness and resentment, and who then make such a social virtue out of ignoranceignorance, Hobie, not stupiditythat youngsters like you are shamed and pressured into denving their intelligence, these are not fools, these are criminals."

HOBIE looked at them miserably from the bed. A lot of Pa's words went rumbling around in his mind. Only one came to his tongue. "Eggheads," he said "Eggheads."

Todd grinned. "Oh, no. The ones you think of as eggheads never make it up here. We operate on Think-Do. They only Think."

"Answer me one question," Lecayo said. "Honestly. Did you try to destroy Babylon because you truly hate it, or because you wanted it more than anything else in the world, and couldn't have it."

There was a long silence. Finally Hobie said in a small voice. "What are you going to do

with me?"
Chowdhury said, "You haven't answered Mr. Lecavo."

"Yes, he has," said Lecayo. He looked pleased, and nodded to Todd.

"We're going to send you home," said Todd, "Now listen to me. Hobie, very carefully, If you decide that you want to try to come back here somedavthrough the front door, with your head up-you go to the Educational Foundation. You know where that is, on the square five blocks north of the spaceport. Tell them who you are, and you'll be taken care of. A lot of your time has been lost, and you would have to work extremely hard, so be sure that you want to go through with it. If you decide to stay with your father, that's up to you. But Hobie . . ."

He fixed Hobie with his eyes, and Hobie shivered. "Don't try this again," Todd said.

Hobie hung his head.

After a while they took him down to the lowest level where the tender was waiting. As he entered the lock-chamber he saw the girl Ellen standing a little distance away, watching him. He looked at her, and now he wanted to say something, and could not. He followed Todd and the others to the tender. Just before they left him Leaves said, "There's nothing more important in the world than truth. It's often painful and hard to find, especially when it concerns yourself, and sometimes it's even dangerous. There's never been a day when it wasn't easier and pleasanter just to go along, and never question. You can go back to being part of your group. Or you can start being an individual. The choice is up to you."

Hobie did not answer. The three men went out of the tender. Hobie sat still and heavy as a rock while the tender dropped free of Babylon and swept in a long spiral toward the shining Earth.

I TOBIE took two days to get 11 home. Todd had given him some money and he could easily have taken a bus, but he walked instead, along the coast road where he could stop and sit and look at the ocean. At night he curled up in the cold sand and shivered, and watched the stars go by, the pale stars on the flat black surface of the sky. All that time he wanted desperately to go home, and yet he could not bring himself to do it. He tried desperately to think, and he could not. His mind remained locked tight like an iron box. He watched the bright star of Babylon pass through the heavens, and he felt

nothing. That was the strangest part of it. The hate was gone, but the iron box of his mind would not yield anything else to replace it.

Late on the second day he knew that it was time to go home, though he did not know why.

It was dark when he reached the house. He came like a skulking thief across the sun-singed grass of the yard, toward windows that showed a dim light. Cautiously, he peered into the living room. Ma and the boys were watching TV. He couldn't see their faces but Ma was sitting in a kind of dejected way, and Hobie realized suddenly how he must have worried her, taking off like that without a word. He wanted to run inside and throw himself down beside her and say. "I'm home, I'm home," and really be home, but he didn't move. He did not see Pa. Then he heard the front door open and shut, and knew that he was standing on the porch. Hobie turned and went with stiff slow steps to the front walk. "Pa."

Sam Macklin stood high and shadowy and tall above him. "Give me a minute, Hobie. Give me a minute to know if I'll put my arms around you, or beltstrap you within an inch of your life." "Pa," said Hobie again. He looked up, remembering the love and pride.

"Where have you been? What made you go off like that?" "Pa, it wasn't the cities that

robbed me."
"What are you talking about."
Sam Macklin came down the two

cracked shallow steps.

Hobie moved back. "It was you," he said. "You robbed me."
He backed farther still, afraid of

He backed farther still, afraid of this tall man his father, afraid because the love and the pride were still there, and the fron box had come wide open, and everything was a dark confusion of pain and loss. And still the words came.

"I'm leaving you. I got to leave

you and be what I am. I almost
..." He stopped and tried again.
"Because you made me into
something else, I . . ."

Suddenly he turned and ran, salt-eyed and sobbing, away down the dark street.

Sam Macklin's voice rang after him, "Hobie! Hobie!" But he lost himself in a tangle of yards and fences and winding blocks of houses, and the voice grew faint. Finally it stopped.

Hobie walked on toward the

Just before dawn a brilliant star passed over. Hobie reached up his hands toward it, and

# JUPITER FOUND

By ROBERT F. YOUNG

Illustrated by FINLAY

Godhead can be more than a guilt complex growing out of the knowledge of good and evil. It can also be a sense of fulfillment that comes from the ability to create.

OM sunk a new shaft, lowered his skip-arm into it, and scooped up huge handfuls of iron ore into his blast-furnace belly. Around him swirled the grayish murk that passed for an

atmosphere on Jupiter. Dislodged pebbles, propelled by the rampaging wind, pelted ceaselessly against his metal hull. The temperature stood at -169 degrees Fahrenheit.





A picture of himself of old sitting at a roseate fireside flashed upon the screen of his memory. It was superseded by a picture of a pretty girl walking down a springtime street. Resolutely he ignored both sequences. They were remnants of an old movie that had been written around a young man named John Sheldon, and John Sheldon was dead. SM. nee John Sheldon, chased

8M, nee John Sheldon, chased the ore with several skiploads of limestone and coke from his stock-stomach; then, his blast-furnace belly replete, he stopped to rest. But not for long. The ingots from his last hearth-heat were due to be removed from his soaking pits in a few minutes, and he could not let them overstay their time. The life of a M.A.N., model 8M, was not an easy one. But then, he had known that when he had bequeathed his brain to the Company.

He was not sorry. Far better to build bases on the wind-tous surface of Jupiter than to lie in cold and eternal oblivion beneath the unheeding surface of Earth. And there was the longevity factor to be considered too. As a man, even if he had lived, he probably wouldn't have reached the age of ninety. As the first M.A.N., however, he might very well reach the age of nine hundred and fifty.

A patriarchal age indeed but, unlike the patriarchs of old, he would have no sons and daughters to carry on after he was gone.

THE message that he had been momentarily expecting from the orbiting Raphael came through. His transeeiver picked it up, converted it into thought, and relayed the thought to the ganglionic sealed unit that encased both his transplanted brain and the nutrient solution that sustained it. "Model EV just dropped, Will chute into your area any moment." "Good." 8M pulsed into the

trans-transmitter. "Building a base the size of this one is no job for one M.A.N."

"You are hereby notified," the Raphael went on, "that Gorman and Oder Developments, Incorporated, has informed us that one Lawrence Dickens, discharged several months ago for rebellious conduct detrimental to the Company's good name, has started up an advance-construction corporation of his own and may try to sabotage the base in an attempt to obtain Gorman and Oder Developments' Earth Government contract. The Raphael's matter detector indicates that there is another overseer ship in Jovian orbit, and it is possible that Dickens may already have chuted one of his Mining, Adapting Neo-processors into your area. If so, you

will recognize it by its greenishyellow coloring. Its model designation is 'Boa 9', and Dickens himself will be the operator. You are hereby advised to stay on your toes."

"My tracks are the best I can do," said 8M wryly.

"The Company frowns on levity," the *Raphael* said sternly, and signed off.

Annoved, 8M activated his

transperipheral vision. The Company frowned on too many things, if you asked him. Sometimes it even frowned on free will, Consider, for example, its going to all the trouble and expense of creating a self-sustaining, self-reliant Mining, Adapting Neo-processor like himself, and then arbitrarily forbidding him, on the pain of death, to use edenite-an iron-like ore endemic to Jupiter-in any of his melts. He should have been permitted to make his own decision in the matter. Certainly, if the ore had proved to be injurious to his "system", he would have ceased using it at once. There had been no need for the Company to forbid him to use it. He was a M.A.N .- not a little child. The rotating transperipheral

The rotating transperipheral beam relayed more murk to his retinal screen, more desolation. Jupiter was a place of constant atmospheric turmoil and treacherous terrain. A human being, using the body God gave him, could not exist anywhere on the surface without the protection that a base afforded, and as a consequence, the base had to be built beforehand. All previous attempts had failed, and 8M represented mankind's last hope of ever colonizing the planet. If he failed, the project would be abandoned, and Jupiter's rich resources would be allowed to remain in their native state. Thus far he had succeeded-after Herculean efforts-in laving the foundation. Now there remained the building of the base proper. and for this he was to have a helpmate.

Lord knew, he needed one.

WHILE he was waiting for the EV to contact him, he removed the ingots from his soaking pits and began processing them into structural steel. As a M.A.N., he left much to be desired. He was excellent for mining, and his blast-furnace belly functioned admirably: but his open hearth lacked sufficient tonnage capacity and was much too slow in turning out heats. while his blooming, roughing, and finishing mills were inadequate for the task on hand, not because the internal area devoted to them was too limited, but because the available space had not been put to maximum use. The same objection held true for his continuous mills, and as for his parts-replacement shop, he sometimes wondered whether he would last out the nine hundred and fifty years guaranteed him by the Company after all.

He had just started the glowing ingots through his blooming mill when the EV's "voice" came through the thought-converter: "EV to 8M. Drop completed successfully—am awaiting your directions."

"This is 8M. Keep sending, and I'll home in on you."

Continuing his internal operations, he set off over the ragged gray hills that characterized the local terrain. Around him, the wind howled in cold and unrelenting fury, but with his hull audios turned way down, he hardly heard it. He hardly heard the crunching of his huge caterpillar tracks either, or the rata-tat-tat of the wind-borne pebbles against his metallic body. At length his transperipheral beam picked up the EV. The machine was no more than an indeterminate gray shape at first, but gradually, as he grew closer, it resolved into a trim, streamlined unit considerably smaller than himself. He saw instantly that it was a new model. Its tracks were relatively narrow. and there was a delicate aspect about them. Its mining section was much narrower than his own, while its blast-furnace section was slightly smaller. The open-hearth section, however, was comparatively enormous, and put his own to shame, while the flanks of the processing mills and parts-replacement shop contracted smoothly—rather than unevenly, as did his own—to the terminus-compartment where the nuclear power-plant was located. A less powerful M.A.N. than

himself, certainly; but perhaps a more efficient one. He would see. "Welcome to Jupiter," he said. "I'm 8M—formerly John Sheldon of Earth."

"EV-formerly Helen Quinn of same."

He stopped in his tracks, both literally and figuratively. It simply hadn't occurred to him that a woman would respond to the Company's request for volunteers, and even if it had occured to him, the possibility of the Company's installing a woman's brain in a M.A.N. would not have.

"I am not a M.A.N.," she said, seemingly sensing his thoughts. "I am a W.O.M.A.N.—a Weld Operating, Mining, Adapting Neo-processor."

HE hardly "heard" her. "I don't understand it," he said. "With such a high incidence of arrowway fatalities, and with so many bequeathed brains to choose from, why should the Company have chosen a woman's?"

"You're overlooking the fact." she pointed out, "that in the majority of arroway fatalities, the brain itself is in some way damaged, and you're overlooking the additional fact that ninety perent of the brains that have been bequeathed to the Company are intellectually and vocationally unsuited for symbiosis. I happened to be a qualified engineer, and apparently I possessed the requisite intelligence. In any event, I qualified, and here I am."

"How old were you when you were killed?" he asked her. "Twenty-four, And you?"

"I was twenty-six. The way I went in for arrowway travel, it was a wonder I lasted that long." He was thoughtful for a moment. Then, "I wonder if we got ourselves killed deliberately."

"Probably. Most arroway drivers do. And yet we hunger after immortality. It's a paradox, isn't it?"

He realized to his surprise that he rather liked her. "What will you do after the base is completed?" he asked.

"Help you build the next."
"The whole project will be abandoned if we don't show results on this one—did they tell you that?"

"Yes, they told me. As the first M.A.N. and W.O.M.A.N., we're Gorman and Oder Developments' last hope. If we fail, the Farth Government will break

the contract. But we won't fail, will we?"

Abruptly he visualized the face of a pretty, blue-yed girl, and he knew somehow that it was her face—the face she had had in the land that had given her birth. "No," he said, "of course we won't fail. Come with me, and I'll show you what I've completed so far."

He helped her free herself from the huge foil chute that had borne her through the atmospheric maelstrom; then, side by side, they set off over the ragged hills. She spoke no more, and neither did he, till they reached the site of the base. Little was to be seen, save for the geometric pattern of the noncorrosive footings he had laid. and the small stockpile of structural steel he had begun to build up, "Our main concern now is production," he said. "What's your maximum openhearth output, EV?"

"Three hundred Earth-tons a

He was dumfounded. "Why, I can only turn out one hundred

and twenty-five!"

"I was specially built," she said proudly. "The Company foresaw the need of me long

ago."
"But your mining operation
will hold you up, and so will
your pig-iron output. Your skin-

arms aren't strong enough—I can tell that just by looking at you."

"No, but yours are. For all its vaunted powers in allied fields, a M.A.N. is mainly a mining machine, whereas a W.O.M.A.N. is intended primarily for melting. processing, and creating. You can mine much faster than you can melt: I can melt much faster than I can mine. Therefore, it is the Company's wish that we work as a team. From now on. you will charge my open hearth in addition to your own. For that reason I was created with an exterior charger-door, while you were created with an exterior charger-keel. Haven't you ever wondered what the additional appendage was for?"

8M sighed. "The Company doesn't overlook a thing, does it?" he said. And then, "Well, if we're going to embark upon such a strenuous schedule, I think we'd better get some rest first. I'm sure you must be worn out from your intensive-training period, and as for myself, I've been on the go for sixteen hours straight."

"I am a little beat at that," she said.

"There's a sheltered valley not far from here where we can sleep."

H<sup>E</sup> led the way to it. It was as narrow as it was deep, and

there was barely enough room for them to park side by side. Her hull was just as impervious to the wind as his was, and they could just as well have bedded down elsewhere, but there is a psychological advantage in being shielded from the wind whether one needs to be or not, and he wanted her first night on Jupiter to be a pleasant one.

After seeing the last of the ingots through his mills, he gave his blast-furnace belly a final tan and pigged the heat. Then he deactivated his eyes and settled down, first checking to see if his alert-field was on. Presently he slept. As always, he dreamed of Earth. Of green grass and blue skies; of trees and meadow flowers. Of the morning freshness of overnight snowfalls and of the taste of a woman's lips at sundown. Of the arrowway accident that had chewed up his body, but which had miraculously spared his brain. The body the Company had given him was grotesque in comparison with his old one, but he was humbly thankful for it. He had eyes with which to see and ears with which to hear. He had no legs in the strict sense of the word, perhaps, but he possessed a mobility that, despite the much greater gravity he had to cope with, put his former mobility to shame, and he had at least a

thousand arms. Some of them

were cranes and some of them were charger-keels and some of them were skip hoists, and all of them were tools of one kind or another; but he could do things with them he couldn't have begun to do with the frail fleshand-bone pipestems he had once called arms, and anyway, in the last analysis weren't all arms tools? And wasn't the true measure of a man or a M.A.N.'s worth the number and the variety of the tasks he could perform? On Earth, he would be considered a monstrosity, just as EV would be: but here on Juniter they were M.A.N. and W.O.M.A.N.

When he awoke in the drab Jovian dawn, his metallic body was lightly touching hers. The sole purpose of the tactility which had been built into his being was to give him an alertness which he might otherwise have lacked, and as a result he had never associated his ability to feel with the perception of pleasure. He did so now, though, and he was loath to move away. When at last he did so, she awoke. "Good morning," she said. He could not remember the

last time he had been greeted with those two sweet words. "Good morning," he said back. "Did you sleep well?"
"Yes. But I dreamed too."

"The dreams are a part of it,"

he said. "You'll get used to them."

He led the way out of the valley, and they started back toward the base. He saw the track-impressions then, and knew instantly that neither he nor EV had made them. The wind had long since obliterated their own impressions, and in any event, these had been made by a different type of machine. "They're Boa 9 impressions," EV said. "We have company."

"It must have skirted my alert-field—I should have upped the radius. I hope the base is all right."

The impressions led straight to it, paralleled the line of footings for a while, then veered off it, an altogether different direc-The M.A.N. and the W.O.M.A.N. stuck to the trail. but the impressions grew rapidly less distinct, and presently faded out altogether, 8M halted on a high hill, and EV drew up beside him. "You know more about this business than I do." he said. when his transperipheral vision netted him nothing more than the usual quota of murk and desolation, "Why should Dickens go to such lengths to defeat the Company when he may not be able to get its contract with the Earth Government anyway?" "Vengeance," EV said. "He

was pretty high on the Company

ladder when he got the sack, and the fall must have been pretty painful. When he left, he talked quite a number of other employess into leaving with him, which explains how he was able to set up a rival concern so fast."
"And he actually sacrificed his

life and became a M.A.N. just to get even?"

"Not a man-a sort of super-M.A.N. And he didn't sacrifice his life. The Boa 9, which he designed himself, goes one step bevond the Company's M.A.N. Dickens solved the riddle of perplanet radio waves, and controls the machine from his orbiting ship. But he sees, feels and hears just as he would if he were actually a part of the machine, and his reactions, despite the slight time-lapse, are almost as hairfine as ours are. He is a very brilliant man, and I'm afraid that someday the Company will regret letting him go."

"Perhaps. Obviously, though, he's emotionally unstable." 8M swung his block-long body around. "Well, it's time we got on the job. We'll work eight hours on, and eight off—that way we'll stay in step with Jupiter's night-and-day cycle. All right?"

"All right," she said.

SHE had her open hearth ready by the time they reached the ore deposit which he

had been mining yesterday, and he fed an experimental charge through her exterior door, employing his outside charger-keel. First limestone, and then ore, The warmth of her reached out and bathed his flanks, and the red-hotness of her hearth traveled throughout his whole body. In lieu of "giving her a drink" -an operation for which he was not equipped-he charged her with the pigs he had poured the night before. This, of course, delayed the heat, but even so, she had it out in half the time his own hearth would have required. Thrilled, he plunged into the

mining end of the operation, while she processed the heat. A delay occurred when his main ore-crusher broke down and one of its parts had to be replaced. He would have made the part himself, but she offered to do the job for him, saying that it would be good practice. She had the part ready in no time, and it was an exact replica of the old. Installing it required, not hours, as ordinarily would have been the case, but mere minutes.

He was delighted. "You're quite a W.O.M.A.N. at that," he told her.

"My parts-replacement shop is equipped with the best machines money can buy," she said proudly. "Given the specifications, I can manufacture anything under the sun." She paused, and a

wave of sadness reached out and touched his hull perceptors. "Except—except—"

"Yes?"

"Nothing," she said. "Shall we get back to work?"

By nightfall, he had both his and her mills in action, and heats coming up in both their hearths. He charged her once more before they settled down for the night so that a heat could be tapped first thing in the morning. A feeling of contentment such as he had not experienced since becoming a M.A.N. came over him as he rested beside her in their valley bed, but he did not permit it to lull him into a concomitant feeling of security, and after deactivating his eyes, he extended his alert-field to maximum radius. If the Boa 9 tried any tricks, he would at least have forewarning.

The Boa 9 did not, however, and the night passed without incident, 8M began mining operations as soon as they reached the ore deposit, while EV poured and processed the heat which she had nursed during her sleep. The stockpile of structural steel was growing visibly now, and in a few days they would be able to shut down their systems and begin erecting the first level of the base, Oddly, 8M found the prospect dismal, rather than cheering, and he was at a loss to understand his apostasy.

LATE that afternoon, when he was charging EV for the third time that day, the Boa 9 put in an appearance 8M picked it up on his transperipheral beam long before it reached the immediate vicinity, but he did not cease operations, and he was still hard at work when the big yellow machine descended the nearest hill.

It stopped in its tracks. The charge completed, 8M turned. "This is Company property," he said. "I advise you leave immediately."

"This is anybody's property."
the thought came, "and it will
remain anybody's property until
such time as a practical base is
established. At the moment,
you're a long ways from establishing anything of the kind."
And then, unexpectedly, "What
were the two of you doing a minute ago?"

"Working," 8M said. "What did you think we were doing?"

did you think we were doing?"
For a while the Boa 9 didn't
say anything, and 8M got the
impression that it—or, more accurately, the orbiting controller
—was deep in thought. When it
finally did speak, it addressed
EV. "How beautiful are thy feet
with treads, O prince's daughter!" It said, and turned and
rolled away.

8M stared after it till it faded from his transperipheral vision. "What did it mean?" he asked. "I'm-I'm not sure," EV said. And then. "Had-hadn't we better get back to work?"

They resumed operations, and got out two more heats prior to inght fall. As before, he charged her before they went to sleep so that a heat would be ready first thing in the morning. She moved in very close to him, and the awareness of her was almost more than he could bear.

THE next morning he reported their progress to the orbiting Raphael. "The Company will be pleased," the Raphael said. He also reported their meeting with the Boa 9. "G.O.D.s wrath will descend upon the wretched creature within the hour!" roared the Raphael. "We are homing in on the control ship now, and we will blast it from the heavens!"

The Boa 9, however, was still

"alive and kicking" that afternoon. Again, 8M picked it up on his transperipheral beam while he was charging EV. She picked it up too, and so distrait did she become for a moment that if he hadn't known better he would have sworn that the two of them were in some kind of rapport. This time, the big yellow machine kept its distance, and presently if rolled out of sight. "I wish I knew what it was

up to," 8M said. "If it's going to sabotage the base, it's going about it in a roundabout way." "If you hurry, you can charge me once more before we quit for the day," EV said.

In the morning, when he turned on his eyes, he found her gone. However, the alarm that clamored through him was as brief as it was abrupt, for he had no sooner emerged from the valley than he saw her rolling toward him over the hills.

He was put out. "Where have you been?" he demanded. "You've no right to go off like that without a word!"

It was some time before she spoke, and he could feel the gentle pulsing of her thoughts. At length, "Please don't be angry with me, 8M," she said, "but yesterday afternoon the Boa 9 and I arranged a rendezvous, and early this morning I went out to meet him. He—he told me many things about the Company that I didn't know, and he told me how you and I could—could be how you and I could—could be now you and I could—could from the country she broke off. Then, "8M, do you love me?" she saked.

The unexpected question aet him back on his tracks. He had never thought of love in connection with himself and her for the simple reason that they were a M.A.N. and a W.O.M.A.N. But didn't a M.A.N. and a W.O.M.A.N. have as much right to fall in love as a man and a woman did? Suddenly he realized that as far as he was concerned, the

event had already come to pass, and the knowledge sped forth into every circuit of his system and set the whole metallic bulk of him to tingling. "Yes, EV," he said, "I love you very much." "Then come with me."

She led him back over the hills to an expanse of relatively level terrain. The faint bluish glow that emanated from the ground told him instantly that there was an edenite deposit not far beneath the surface, and instinctively he held back. She nudged him on, paused presently beside a recently sunk shaft. He looked at her in horror. "Yes," she said, in answer to the question he lacked the courage to ask, "I have mined of the forbidden ore, and now you must mine of it too,"

"The Boa 9," he said. "It

tricked you!" "No. it did not trick me. It merely explained to me the true nature of edenite. Edenite represents the planet Jupiter's sole attempt to create life. The attempt was a miserable failure. because the ore in itself is incapable of instigating the processes necessary to raise it higher on the evolutionary ladder. The only way this can be accomplished is by an outside force absorbing it and, by combining with it, providing it with the impetus it otherwise lacks. Providentially or not, we represent that outside force, 8M, and G.O.D., Incorporated, knows it."
"Then why were we forbidden to mine of the ore?"

"Because G.O.D. also knows that by combining with it we may very well become something more than what we are, and G.O.D. doesn't want us to become something more than what we are. G.O.D. wants us to remain mere machines to the end of our days. We were created to serve and to make money for the Company, and for no other purpose. Do you want to go on being a machine to the end of your days, 8M? That is what you are, you know, for all the illusions you may sometimes have of being human. A peripatetic apotheosis of automation pretending to be a man. You're not a man. 8M-any more than I, up until a few hours ago, was a woman."

STUNG, he said, "G.O.D. will destroy you for your disobedience."

"G.O.D. will not destroy me.
Even the Company, powerful as
it is, cannot run the risk of dropping an atomic or a hydrogen
bomb on a planet about which as
ittle is known as this one, and
that is the only way I can be
destroyed—or you either, for
that matter—since we represent
an experiment that falled and
which will not be attempted
again. Dickens will not try to

obtain a contract—he never intended to in the first place. He swore to me that his sole purpose in establishing a rival concern was to thwart G.O.D. So mine of the edenite, 8M. You must, for now that I have mined of it, you have no other choice."

What were the lines? Dimby

What were the lines? Dimly, they came back to him-

The link of nature draw me:
flesh of flesh,

Bone of my bone thou art, and from thy state Mine never shall be parted.

Mine never shall be par bliss or woe.

Yes, it was as true now as it had been that other time. He lowered his skip-arm into the shaft, crushed the glowing ore and scooped great handfuls up into his blast-furnace belly. Suddenly, delight at defying G.O.D., Inc., coursed through him, and he seized more ore and dumped it into charger pans and fed them into his hearth-bath. He prepared a charge for EV, and when he turned toward her, she was waiting. He felt the warmth of her, the wanting; and the wanting awoke reciprocal wanting. Flames leaped up with the first charge, played weirdly over their joined metallic bodies. Steel of mu steel, he thought, Melt of mu

Days later, foraging for ore with which to build their ready been covered by the rampaging wind, and the Raphael had departed Earthward. G.O.D.'s wrath over their dereliction had known no bounds, but all G.O.D. had been able to do in the way of retribution was to set up a self-maintaining force-field around the edenite deposit. On Juniter, however, there were

many Edens . . .

homestead, they came upon the

abandoned Boa 9. The footings

of the neglected base had al-

The Boa 9, now that its controller had absconded from the Jovian heavens, had something of the aspect of an empty snakeskin. They left it where it was, and went about their business. Neither of them knew their nakedness, and neither ever would, Godhead can be something more than a guilt complex arising from a knowledge of good and cuil—it can also be the sense of completion that results from the ability to impart life.

That evening, the setting sun turned the omnipresent murk into a burnt orange, and the ragged hills came very close to being beautiful. It was an appropriate moment for EV to say what she had to say. Not long thereafter she brought

Not long thereafter she brought forth into the light of day the first child born of M.A.N. and W.O.M.A.N., and life at last took root on the fifth planet from the sun.

THE END

melt . . .

#### By JOHN WYNDHAM Mustrated by SCHELLING

John Wyndham's fame rests on the creation of ruthless, chilling alien life. Now the British author does an about-face, and holds us equally as spellbound with this story of an unnaturally emphatic visitor named . . .

### CHOCKY



IT could have been the end of April, or possibly early in May, at any rate it was sometime in the spring of the year Matthew reached twelve, that I first became aware of Chockv.

I was in the garden shed, tidying up a few of the things that always get stiffed in there for the winter, when I heard Mathew's voice speak close outside the window. I had no idea he was anywhere about until, apropos of apparently nothing, he said with a touch of irritation:

"I don't know. It's just the way things are."

I assumed he had brought one of his friends into the garden to play, but there was no reply to his remark. Presently, he went on:

"Well, the time the Earth turns round is a day, and that's twenty-four hours, and—" He broke off as if he had been interrupted. After a pause he continued:

"I don't know. I don't see why thirty-two hours would be more sensible. Anyway, twenty-four hours do make a day, and seven days make a week—" again he seemed to be cut short, though inaudibly, and he protested: "I don't see why seven is a sillier unmber than eight—" Again a pause. "Well, who wants to divide a week into halves and quarters, anyway? A week just fix seven days. And four weeks seven days. And four weeks

ought to make a month, only usually it's thirty days, or thirty-one
—"..."No, it's never thirtytwo days. You've got a thing
about thirty-two—"..."Yes, I
see that, but we don't want a
week of eight days. Besides, the
world goes round the sun in three
hundred and sixty-five days, and
nobody can do anything about
that that'll make it into halves
and quarters."

At about this point the peculiarity of this one-sided conversation aroused my curiosity enough to make me put my head cautiously out of the window. It was warm outside. Mathew was sitting on an old seed-tray, leaning back against the shed wall a little to my left, so that I looked down on the top of his fair head. He seemed to be gazing straight ahead of him across the garden. There was no sign of anyone else. He went on:

"There are twelve of these

months in a year, so—"

He broke off once more, and I

could see he was holding his head as if he were listening, but there was not a whisper of a voice to be heard.

"It's not just stupid," he objected. "It's because no kind of same-size months would fit into a

same-size months would fit into a year properly, even if—" This time the source of interruption was very audible, our neighbor's boy, Colin, calling through the hedge. Matthew jumped up with a friendly yell, and ran off across the lawn to join him.

THAT evening after supper I inquired of Mary:

"Have you noticed anything odd about Matthew lately?" She lowered her knitting.

"Oh, you too," she said. "Was he talking to himself, or listening to nothing?"

"Talking—well, I suppose both, really." I said. "How long has this been going on?"

"I noticed it first about—oh, two or three weeks ago. It didn't seem worth bothering about. Just a phase. But now I don't know. I've begun to have an uneasy feeling that perhaps Piff, or something like her, is with us again."

Piff was a small—at least, it suppose she was small—invisible friend, or soulmate, that Betty our daughter, acquired when she was about five. And she was a great muisance. Any unexpected movement was likely to bowl over the intangible Pilf who would then be embraced and comforted with a lot of slop about brutal daddies.

Piff was with us about a year—though it seemed longer. Then she somehow got mislaid during the summer holiday. She was callously dropped when Betty made several more substantial,

and much more audible, young friends, and did not return home with us. Once I was satisfied that she was not going to follow, I was able to feel quite sorry for the deserted Piff still wandering in summer's traces upon the forlorn beaches of Sussex; nevertheless, her absence was a relief to us—even, I think, to Betty. I could well understand Mary's misgiving at the thought of another such experience.

AN oppressive notion." I agreed, "but mereifully baseless, I fancy. A Piff has her place, as a subordinate for the younger female age-groups to push around just before they hanker to boss ponies. She is not much to the taste of an eleven year old boy; he tends to take it out on other, and smaller, boys. I don't think we need be alarmed."

"I hope you're right," Mary said. "But what I overheard did sound pretty reminiscent of a Piff conversation to me."

"Couldn't that be just because it was one-sided? There was quite a different quality about what I heard. I mean Piff was a subordinate. About eighty-percent of the time she was being scolded, and having to take it. This one appeared to be criticising, and coming back with opinions of its own."
"What do you mean David?"

I repeated as nearly as I could

what I had overheard. Mary frowned.

"I don't understand that," she hige

"Oh. I don't know. After all, the arrangement of a calendar is

simply a convention-" "Not to an eleven-year-old, David. To him it's a kind of naturally appointed law-like the seasons, or day and night. It's just one of the facts of life that a week is a week and has seven

days-unquestionable." "Which is about what Matthew was saying."

"He must have been arguing with the recollection of what somebody's been telling him at school."

"H'm," I said doubtfully, "I never heard of anyone advocating an eight-day week, did you? There is an idea about every month being twenty-eight days, with an extra day a year to keep the score straight-but thirtytwo days to the month! I bet you never heard of that, either-besides, it's cockeyed. What would you do with the thirteen loose days left over?" "Don't ask me. I didn't start

it," said Mary.

"I didn't mean to make heavy weather of it," I told her. "It just struck me as odd, and I wondered whether you might have noticed something, too." She considered her knitting,

"I just noticed it, but I did not listen. There is another thing though: the questions he's been asking late . . ."

"Lately?" I repeated. "Was there ever a time when he did not?"

"I know, but these are different. I mean-well, usually most of his questions are average-boy questions, rather practical."

hadn't noticed they'd changed."

"Oh, the old kind keep on, but there's a new kind, too, Off his usual beat." "Such as . . . ?"

"Well, one of them about why are there two sexes? Naturally, I started to explain, but that was not what he was after. Why was what he meant. He said he could not see that it was necessary to have two people to produce one, so how had it got arranged that way, and why? It's difficult, you know, on the spur of the moment. I mean, one's always taken it for granted. But when you come to think of it, it is a curious and complicated way of going on, and I found I haven't the least idea how, or why, it came to be arranged as it is .- Have you?" "Um-well, now you mention

it . . . Of course, it does help to -er-spread the load . . ." I tried, doubtfully.

"But I didn't mention it . Matthew did. And he had another one about: Where is Earth? Now I

thoughtfully.

ask you: Where is Earth?—in relation to what? Oh, yes, he knows it goes round the Sun—but just where, please, is the Sun? And there were some other ones, too; simply not his kind of questions."

I could see that. Matthew's questions usually moved in a narrower orbit; things like, "Why use a washer with a bolt?" or, "Why can't we live on grass if horses can?"

"A new phase," I suggested.
"He's reached a stage where
things are beginning to widen
for him?"

Mary shook her head at me, reproachfully.

"That, darling, is what I've been telling you. What is puzzling me is why they should widen—and change, too—quite so suddenly."

"But, hang it all, that's what children go to school for."

"That's not quite it." She frowned. "It's not just development—it's a—a sort of sudden change in quality." She paused, and went on frowning. "I'm not sure how we should cope with it."

"It think the best thing we can do is to listen and watch carefully for a bit, and compare notes. It may be just an insignificant phase that won't last long. If it isn't, and it troubles you, then we shall at least have some data to present if we want professional advice." And at that we left it for the time being.

But not for long. In fact I col-

But not for long. In fact I collected my first specimen the very next day.

That day Matthew and I chose the river-bank for our usual Sunday-afternoon walk.

He seemed to me much as usu-

He seemed to me much as usual, though perhaps a little more noticing, more aware of the things about us, than he used to be. And yet I could not quite make up my mind whether it was not that I was more noticing of him. It wasn't until we were passing below Five Elms Farm, through a field where a couple of dozen cows eyed us blankly on our way, that anything occurred which I could feel to be outside Matthew's expected behavior.

W/E were almost across the field, just short of the stile in the far-side hedge when Matthew slowed to a halt, and stood regarding the nearest cow seriously. The cow looked back at him, with a touch of disquiet, I thought. After contemplating it for a few moments, Matthew inquired:

"Daddy, why is it that a cow

It sounded at first like a whydoes-a-chicken-cross-the-road question, but Matthew was frowning at the cow, studying it with great concentration.

"Stops what?" I asked.

"Well, it gets a bit of the way. But then it doesn't ever get any further. I don't see why not."

I was still out of touch.

"A bit of the way where?"
Still with a thoughtful frown,
Matthew explained:

"Well, when old Albert comes to the yard gate there, all the cows understand it's milkingtime. They all know which stall to go into in the shed, and understand about waiting there until they've been milked. Then, when it's over and Albert opens the gate again they'll understand about going back into the field. But there it just stops. I can't see why."

"You mean why they stop understanding?" I tried.

"Yes," Matthew agreed. "You see, they don't want to stay in this field, because if there is a gap in the hedge they find it, and get out. So why don't they just open the gate themselves, and go out? They could, easily."

"Well, they-er-they don't know how to open it," I said.

"That's just it, Daddy. Why don't they understand how to open it? They've watched Albert do it hundreds of times—every itime they ve been milked. They've got enough brains to remember which stall to go to—why can't they remember how Albert opens the gate? I mean, if they can understand some things why not that? What is it that doesn't go on happening inside their heads, so that they stop,"

That showed me clearly enough what Mary had meant. Not at all the sort of inquiry one associated with Matthew—and, as she agreed when I reported, really quite a question . . .

IT was, I think about ten days I after that that we first heard about Chocky. Matthew had picked up some fluey kind of germ at school, and ran quite a temperature for a couple of days. When it was at its height he rambled a bit. There were times when he did not appear to know whether he was talking to Mary. or to me, or to this mysterious character he called Chocky, What was more, this Chocky seemed to be worrying him, for he protested several times. On the second evening when we were both in his room he was very restless. His color was high and his brow damp, and he kept rolling his head from side to side on his pillow. In an exasperated voice he said:

"No, Chocky. No, not now. I don't understand. I want to go to sleep . . . Oh, do shut up and go away . . . No, no I tell you! can't now . ." He rolled his head again, and pulled his arms from under the bedclothes to press his hands over his ears. "Oh, stop it, Chocky. Do shut up!"

Mary put her hand on his forehead. He opened his eyes, and became aware of her.

"Oh, Mummy. I'm so tired. Do tell Chocky to go away. She won't leave me alone . . ."

Mary glanced at me. She sat down on the side of the bed, propped him up a little and held a glass of orange juice for him to drink.

"There," she said. "Now lie down, darling, and try to go to sleep."

Matthew lay back.

"I want to go to sleep, Mummy. But Chocky will keep on talking. She doesn't understand. Please make him shut up."

Mary put her hand on his forehead again.

"You'll feel better when you

wake up," she said.
"But do tell him, Mummy, Tell

him to go away."

Mary hesitated, and glanced at
me again. Then she addressed
herself to a point slightly above

Matthew's head.

"You really must let Matthew
be quiet and rest, Chocky. He
isn't at all well, and he needs to
go to sleep. So please leave him
alone now, and perhaps you can
come back tomorrow when he is
better."

"See?" said Matthew. "You've got to clear out, Chocky, so that I can get better."

It appeared to work. Matthew visibly relaxed. Presently his eyes closed. A few minutes later he was asleep. Mary tucked the bedclothes closer, and put the bell-push handy. We tip-toed out, and went downstairs.

and went downstairs.
"His temperature's gone down
a bit. I think he'll be better tomorrow," Mary said. "But, oh
dear, it does very much look as it
this family has acquired another
Piff. I suppose one can only hope
that it will be less of a pest than
the last one." She reflected a moment. "But it's a funny thing,"
she went on. "Did you notice that
he doesn't seem to be clear
whether this Chocky is a him or
a her? They're asually very positive about that..."

MATTHEW'S temperature was down to normal the next morning. He picked up quickly and was about again in a day or two. So, too, one gathered, was his invisible friend.

his invisible friend.

Now that Chocky was out of
the bag, and, I think, largely because neither Mary nor I had
shown incredulity about his/her
existence, Matthew grew a little
more forthcoming about him/
her. And I must say that to begin
with, at any rate, I found him/
her an improvement on Piff.
There was none of that business
of him/her invisibly occupying
one's chair, or being left behind,
or feeling sick in teashops to
which Piff had been so prone. Indeed, Chocky markedly lacked a

physical side. He/she appeared to be little more than a presence. Akin perhaps, I thought, to Wordsworth's cuckoo; a wandering voice, though inaudible to anyone but Matthew. Furthermore, a voice that paid visits, and then went away somewhere. On the whole Chocky was a considerable improvement on Piff, I thought. Mary was less sure.

Mary was less sure

"Are we," she demanded one evening while staring with a slight squint into the stitches of her knitting, "are we, I wonder, doing the right thing in playing up to this nonsense? I know you shouldn't crush a child's imagination and all that, but nobody ever says how far is far enough. After a point it gets a bit like a conspiracy. I mean, if everyone goes around pretending to believe in things that aren't there, how on earth is the child to distinguish what really is from what really isn't? Don't you think it might be a good idea to ask a psychiatrist about it?"

psychiatrist about it?"
"I'd be inclined to leave it for a bit," I told her. "After all, we managed to lose Piff—in the end, and no apparent harm done. It seems to me like fiction—we read our kind of fiction, children often make theirs up, and live it. I'm a bit troubled that this Chocky seems to have barged into the wrong age-group, but let's see how it goes. If it doesn't start to

fade away after a bit we can consult someone."

But, to tell the truth, I wasn't being quite honest even then. Some of Matthew's questions were puzzling me considerably. They had the same rather offbeat, for him, quality, but there was the difference that now Chocky's existence was acknowledged he did not always present them as his own, but frequently prefaced them with "Chocky says he doesn't see how . . ." or "Chocky wants to know . . ." or "Chocky says she can't understand why . . ." I did not mind that, it was his trick of appearing to take part in any ensuing discussion merely as an interpreter that made me uneasy. It was so well sustained. One thing, however, I felt

One thing, however, I felt could be cleared up.

"Look here," I told him, "I get confused about this he-and-she business. On grounds of grammar alone it would be easier if I knew which Chocky is."

Matthew quite agreed.

"Yes," he said, "that's what I thought, too. So I asked. But Chocky doesn't seem to know."
"Unusual," I remarked. "I mean, it's one of the things people generally get to know pretty early."

He agreed with that, too.

"But Chocky's different," he assured me earnestly. "I explained all about the differences

between hims and hers, but she couldn't get it, somehow. That's funny because she's really frightfully clever. I think, but she said it seemed a pretty silly arrangement, and wanted to know why it's like that." I recalled that Mary had en-

countered a question along these lines. Matthew went on.

"I don't know why. And Mummy wasn't much help. Do you know why, Daddy?"

"Well-er-not exactly why," I confessed, "It's just how things work. Nature's way of doing things, you know.'

Matthew nodded.

"That's what I tried to tell Chocky, sort of, But I don't think I was very good at it. He said that even if I'd got it right and it was as silly as it sounded, there still had to be a why behind it." He paused reflectively, and then added, with a touch of regret: "Chocky keeps on finding such a lot of things silly. It gets a bit boring. She thinks animals are just a hoot. I don't-I mean it isn't their fault they don't know any better, is it?"

WE talked on for a while. I was cautious not to seem to bump, Memories of Piff suggested that pressure on a fantasy is apt to produce sulks. But I found I was not taking very kindly to Chocky, Afterwards, a feeling of uneasiness was somewhat increased when I recollected the entirely serious quality of our conversation, and that not once by a single word had Matthew even hinted that Chocky was not just as real a person as ourselves. It made me wonder whether Mary hadn't been right about that psychiatrist . . . However, we did get one thing

tidied up. After Matthew had explained:

"Chocky talks like a boy, but most of the time not about things boys talk about much, if you see what I mean. And sometimes there's a bit of-well, you know the sort of snooty way chaps' elder sisters often get . . ." we decided that the balance did lean, rather more to the F than the M, so that the usage, providing no strong evidence showed up against it, would, in future, consider Chocky as feminine.

Mary gave me a thoughtful look when I told her and remarked on a wistful note:

"I do think being a parent must have been a lot more fun before Freud was invented. If this fantasy game doesn't clear up in a week or two I shall feel an obligation to do something about it."

"I'm for keeping clear of trickcyclists if we can," I said, "Let a child get an idea he is an interesting case, and you open up a whole new line of trouble." So in the end we remained at

the old stand: waiting a bit longer to see how it went. In point of fact it went rather

differently from anything we'd had in mind.

ONE evening there was a knock at the door. I opened it to find myself facing a man I had difficulty in placing.

"Good evening, Mr. Gore. I don't expect you'll remember me. Trimble's my name. I take your Matthew for maths."

I led him to the sitting-room. Mary switched off the TV and greeted him.

"Matthew's upstairs with his homework," she said. "Would you like me to call him."

Trimble shook his head.

"Oh, no, Mrs. Gore. In fact I'd rather you didn't. I came to speak with you both—about his of course." He paused as if in doubt, then with diffidence he went on: "I do hope you don't mind my calling. This is quite unofficial, of course. In fact it's mostly curiosity on my part—well, perhaps a bit more than that, really." He looked from Mary to me. "Is it you who is the mathematician, or Mrs. Gore?"

Both of us shook our heads, quite decisively.

"It would sometimes be convenient if one of us were," Mary said.

Trimble looked surprised, and a little disappointed.

"That's funny," he said. "You have a relative, or some friend, who is?"

This, too, we denied. Again Trimble looked surprised.

"Well, somebody has been helping your son with his maths. Not that I mind," he hurried to explain, "indeed, in a general way I'm all for anything that gets 'em along. But that's the point: when a child is trying to cope with two different methods, it doesn't always get him along. Now, I'd not say Matthew has a quick grasp of figures, though he's been doing all right until lately. But it seemed to me recently that someone has been trying to push him. and some of the stuff he's been given is getting him confused." He paused, and added apologetically "For a boy with a gift for figures it might not matter; in fact, he'd most likely enjoy it. But, frankly, it's too much for Matthew to grasp, It's muddling him, and holding him back."

"Just as frankly," I told him, "where mathematics are concerned I'm a loss. Do you mean he's trying to get on too fast?"

"Not quite that. It's more of a conflict of systems like—well, something like trying to think in French, German, and Russian at the same time. At first I couldn't understand what had gone amiss, then I managed to collar some sheets of his rough work, and got a line on it. I'll show you."

With pencil and paper he did, for half an hour or so I'm afreid we were a disappointment to him, but I did manage to get a grip on a bit of it, and I was not surprised that Matthew appeared muddled. In the end we thanked him for his trouble, and assured him that we'd do our best to find the source of the confusion.

I LEFT it until Sunday after-I noon, After tea, Matthew and I had the verandah to ourselves. I took a pencil, and wrote on a newspaper margin:

YNYYNNYY "What do you reckon that

means, Matthew?" I asked him.

He glanced at it. "A hundred and seventy-nine,"

he said. "It seems a complicated way when you can just write 179," I

said, "How does it work?" He explained the binary code to me much as Trimble had a day or

two before. "But do you find that way

easier?" I asked. "Only sometimes-and I never

can see how it subtracts properly," he said. "It's such a long way round.

Wouldn't it be less muddling to stick to the ordinary way?" "Well, you see it's the way I

have to use with Chocky because that's how she counts," he explained, "She doesn't understand the ordinary way, and she says it's silly to have to bother with ten different figures just because you've ten fingers, when you only need two."

So Chocky was in this, I might have known . . .

"You mean when Chocky counts she just talks Ys and Ns?" I inquired.

"Sort of, Only not actually, What I mean is I just call them Y and N. for Yes and No. because it's easier."

I remained quiet, wondering how to handle this incursion of the Chocky element. I must have looked merely unintelligent, for Matthew went on to explain patiently.

"See, Daddy. A hundred is YYNNYNN, so as each one is double the one on its right. that means 64-Yes, 32-Yes, 16-No. 8-No. 4-Yes, 2-No. 1-No. You just add the Yesses together, and it's a hundred." I nodded. "Yes, I see, Matthew.

But, tell me, where did you first come across this way of doing it?"

"I just told vou. Daddy. It's the way Chocky always uses."

"But she must have got it from somewhere," I said, perhaps with a trace of irritation. "Did she see it in a book, or something,"

"I don't know. I expect somebody taught her," said Matthew.

I repressed my impatience with Chocky, and turned to one or two other mathematical points that Trimble had raised, insofar as I had grasped them. Matthew did not altogether surprise me this time when he told me that they, too, were devices that Chocky was accustomed to use,

CHOCKY has me worried," I confessed to Mary that evening. "Naturally, children keep making discoveries-well. hang it, that's what education's for-but normally they're pleased with themselves for making them. There is something psychologically unsound, if it isn't downright screwy, with this continual third-person angle-and vet we've got to admit that he's taking a wider interest in more things then he ever did before . . . I suppose the question is whether this second-hand approach is likely to do any harm . . . Trimble certainly wasn't very happy about the results."

"Oh, that reminds me," Mary said. "I had a note vesterday from Miss Toach his geography teacher. A bit confused, but I think it was meant to thank us for helping to stimulate his interest in the subject, but at the same time to suggest tactfully that we shouldn't push him too much."

"Oh," I said. "More Chocky?" "I don't know, I suspect he's been asking her the sort of awkward questions he asked meabout where Earth is, and so on,"

"Suppose one were to admonish Chocky a bit . . . ?" I suggested.

But Mary was against it. "No," she said, "I don't think

that's the way. She'd probably go underground-I mean he'd lose confidence in us, and turn secretive."

That week I took delivery of a new car, a station-wagon. I'd been wanting one for quite a time. Lots of room for everybody. and for a load of gear in the back. We took it out on a short experimental run the evening of the day it was delivered. I was pleased with the way it handled, and thought I'd get to like it. The others were enthusiastic, and it was generally voted that the Gores were entitled to tilt their chins a degree or two higher.

The following evening when I returned I left it parked in the driveway. About half an hour later there were sounds of some commotion out there. At least I could hear Matthew's voice raised in protest, and, looking out, I saw that several passers-by had paused to gaze over our gate with interest. I went out to investigate. Matthew was standing a few feet from the car, very red in the face, and shouting incoherently, I walked toward him.

"What's the trouble. Matthew?" I asked. childish rage running down his

He turned. There were tears of

AMAZING STORIES

face. He choked on what he tried to say, and grabbed my hand with both of his. Conscious of the spectators in the road, I led him round the other side of the house. I had never seen him quite so upset. He was shaking with anger, half-choking with it, and the tears still kept running down his cheeks.

I put an arm round him.

"There now, old man. Take it easy."

Gradually the shaking and the tears subsided.

"Sorry, Daddy," he said, still chokily.

"That's all right, old man. Just take your time."

I gave him my handkerchief. He blew his nose, wiped his eyes and began to be more like his normal self.

"Sorry, Daddy," he repeated.
"All right now—I think."
"Good," I said, "Now, what

"Good," I said. "Now, what was all that about?" "It was the car," he said mis-

erably.
Probably I blinked.

"The car! For heaven's sake, what's the car done?"

Matthew sniffed.

"Not exactly the car," he amended. "You see, it's a super car, and I thought Chocky would be interested. So I started showing it to her and telling her how it works, and so on."

I had an oppressive feeling of

here-we-go-again.

"But she wasn't interested?" I inquired.

Matthew swallowed, but con-

tinued bravely:

"She said it was silly and ugly

and clumsy. She—she laughed at it!" Indignation almost overcame him again at the recollection of the enormity.

I BEGAN to feel really worried. That such a condition of anger and outrage could have been provided by the hypothetical Chocky was alarming. I wished I knew more about schizophrenia, but I also felt that this was not the moment for debunking Chocky. So I asked:

"What did she find so amusing about it?"

"Pretty nearly everything," Matthew told me, with another sniff. "She said the engine was funny old-fashioned, and that any engine that needed gears was ridiculous. And that a car that didn't use the engine to stop with as well as make itself go was stupid. And how it was terribly funny to think of anybody making a car that had to have springs so that it could bump along the ground on wheels that had things like sausages fastened round them. "So I said that's how cars are.

and ours is a new car, and a jolly good one. And she said that was nonsense because our car is just silly and nobody with any brains would make anything so clumsy and dangerous, and nobody with any sense would ride in one. And then-well, it's all a bit muddled after that because I got angry. I don't care what she thinks: I like our new car."

It was difficult. His indignation was authentic; a stranger would have believed that he had been involved in a genuine dispute. I no longer doubted that we must seek advice, but rather than risk a wrong step now I kept up the front.

"What sort of cars do they have where Chocky lives, then?" I inquired.

"That's what I asked," said Matthew, "And she said their cars don't have wheels at all. They don't make a noise, either, and they go along a bit above the ground. She says that cars like ours that have to keep to tracks are bound to run into one another pretty often. But, anyway, if cars are properly made, they're made so that they can't run into one another."

"There's a lot to be said for that," I admitted. "But, tell me, where does Chocky live?" Matthew frowned

"That's one of the things we can't find out," he said. "It's too difficult. You see, if two people don't know where anything is, how can they know where they are?"

"No common point of refer-

ence. Is that what you mean?" "I expect so," Matthew said, a

little vaguely. "But where Chocky lives must be a very long way away, I think. Everything seems to be different there."

"How old is Chocky" I tried. "Oh, pretty old," said Matthew, "Her time doesn't go like ours though. But we worked it out that if it did she'd he at least twenty. Only she thinks she'll go on living until she's about two hundred, so that sort of makes twenty seem less. She says that only living till you're seventy or

eighty like we do is silly and "She appears to think a great many things silly."

"Oh, she does. Nearly everything, really,"

wasteful."

"Rather depressing," I suggested.

"It does get a bit boring sometimes." Matthew conceded.

I WAS increasingly at a loss over what to make of it. Presumably he'd had enough sense of self-protection not to allow any hint of Chocky to escape him at school, and I didn't think he'd confided in Betty. Yet he clearly found it a relief to talk about her to me-noticeably, after the car incident. Nevertheless, there was still a sense of caution, as though any unsympathetic response might cause him to bolt for cover. The situation differed from the Piff era, for whereas Betty, with much satisfaction, had consistently bossed her Invisible friend, Matthew certainly didn't have things all his own way, and at times resented it. His remark about 'other chaps' elder sisters' recurred to me.

Mary was inclined to call in Dr. Aycott, and ask him to recommend a consultant. I did not care for the idea. Old Avcott is an adequate enough pill-shooter, but I did not feel this was his line, nor did Matthew take to him much, and since Matthew had shown enough trust in me to loosen up a bit. I was against what might seem to him an abuse of his confidence-at any rate, as the first move. I suggested we should try a more informal approach first. Mary agreed, and so I set about renewing an old acquaintanceship.

I had known Roy Landis at Cambridge. We had run across one another occasionally since. I knew that after he had qualified had specialized in mental disorders, and now had a post at the Claudesley, and I thought it worth trying him. We had dinner together in town, and I managed to get him interested enough in Matthew for him to agree to come out and see us the following Sunday week.

We had agreed also on how I was to prepare the ground. The next evening I told Matthew:

"I saw a friend of mine yesterday. I think you might like to meet him."
"Oh." said Matthew, not much

interested.

"He seems to share some of

"He seems to share some of Chocky's ideas about cars," I went on. "At least, he thinks our cars are pretty crude."

"Oh," Matthew said. "Did you tell him about Chocky?" he inquired, with a steady look. "Well. I could scarcely pretend

her ideas are yours, because they certainly aren't." I said. "He seemed interested, but not a lot surprised. Not nearly as surprised as I was when you first told me about Chocky. I rather got the idea he'd run across someone a bit like her before."

Matthew showed signs of in.

terest, but he was still wary.
"Someone who talks to him?"

he inquired.

"No," I admitted, "not to him, but to someone—or it may be more than one person—that he knows. I'm afraid we didn't go into it very much."

That turned out to be a promising start. The idea of talking to someone who found Chocky unsurprising clearly had an appeal for him.

ON the Saturday of the weekend before Landis' visit we gave the new car its first real outing, down to the coast. We all bathed, and ate, and then Mary and I lazed in the sun while the children played about. Half past five was packing-up

time, but when it came there was no Matthew. At six he still had not returned. I decided to take a run along in the car to see if I could find him while Mary and Betty stayed in case he showed up.

It was right down by the harbor that I spotted him. He was in earnest conversation with a policeman. I drew up nearby, and Matthew saw me.

"Oh, hullo Daddy," he said, and came towards me, followed by the policeman, who lifted his hand to his helmet.

"Good afternoon, sir, I've just been explaining to your young man that it won't do," he said. "You can't expect people to like you going exploring on their boats any more than they'd like you to go exploring in their houses. Can you?"

"Certainly not, Constable," I agreed. "What've you been up to, Matthew?"

"I just wanted to take a look, Daddy. I didn't think anyone would mind."

"It's not the proper thing at all, Matthew. The constable's quite right. And you're more than an hour late."

"I'm sorry, sir," said Matthew to the policeman. "I'll remember what you said. It's only that I never sort of thought of ships being like people's houses," and he held out his hand. They shook, seriously.

The policeman raised his hand again as we drove off.

"Well, young man, I believe an explanation is in order."

"I'm sorry about being late, Daddy, I didn't notice. You see Chocky's never seen a ship, so I was just showing her, and a man got angry and took me to the policeman. And then you came."
"Oh, I see," I said. "And if

Chocky is running true to form I suppose she thinks ships are silly?"

"Well, I think she does, rather," Matthew admitted. "She said it must take an awful lot of power to keep on pushing all that water out of the way, and would it not be more sensible to have ships that go just above the water, and only have to push air out of the way?"

It was an interesting thought, but we weren't able to pursue it further just then because we had arrived back at our bathing place where Mary and Betty were waiting for us.

SOMETIME during the following week Matthew's school report arrived. It was by no means unsatisfactory, but I thought I discerned a slightly puzzled air about parts of it. Mr. Trimble acknowledged that he had made progress—of a kind, but felt that

at this stage he would do better to confine his attention to the more orthodox forms of mathematics. Miss Toach, while glad to record that his interest in her subject had sharpened considerably, thought he would do better to concentrate on geography for the present, and let cosomography come later. Mr. Caffer, the physics master, was not entirely pleased with him. He wrote: "There has been a marked difference in his attitude this term which has shown itself chiefly in a greater capacity to ask questions than to learn. This has not been helpful to his work." "What have you been doing to

"What have you been doing to Mr. Caffer?" I inquired.

"He gets annoved," said Matthew. "There was one time I wanted to know about the pressure of light, and another time when I said that I can see what gravity does, but I don't see why it does it, and there were some other things, too. He didn't seem to see why, either, and wanted to know where I was getting the questions from. Well, I couldn't tell him they came out of things Chocky had told me. So he got annoyed, But it's all right now. I mean, it's not any good asking him, so I haven't any more." "And there's Miss Blavde, bi-

"And there's Miss Blayde, biology. She sounds a bit put out, too," I said.

"Oh, I asked her how people who only have one sex could re-

produce. She said, well, everybody only had one sex, and I said what I meant was both sexes, but one person. She said that was some simple plants, but not people. And I said not always, and she said nonsense. But I said it wasn't nonsense because I happened to know someone like that. And she said what did I mean? In that kind of voice. Then I saw I'd been a hit dim to ask at all because I couldn't tell her about Chocky, so I shut up. But she kept on wanting to know what I meant. And ever since then she sometimes looks at me very hard. That's all, really."

"Doesn't Chocky have a home—doesn't she ever talk about her father and mother, where she

lives; that kind of thing?"
"Not much," Matthew had
said. "I can't make out what it's

like. Some of the things she says don't mean anything, you see." I said I was afraid I didn't, quite. Matthew frowned in con-

I said I was afraid I didn't, quite. Matthew frowned in concentration. "Well." he tried. "suppose I

was quite, quite deaf and you tried to tell me about a tune—I wouldn't be able to know what you meant, would I? It's a bit like that—sort of. She does sometimes talk about her father, or her mother—but the hims and hers get mixed up, as if they were both the same."

I thought that must be very confusing, Matthew agreed.

"But it is for her, too, She thinks it must be terribly confusing to have two parents. She says it's natural to love one person, but if your parent is divided into two different people it must be pretty difficult for your mind not to be upset by trying not to love one more than the other."

So I felt a certain sympathy with Miss Blayde. Indeed, the report in general increased my desire to hear Landis' opinion.

H<sup>E</sup> arrived the following Sunto see that Matthew took to him easily. After lunch they strolled out to the verandah and remained there talking until six o'clock. They appeared to be on excellent terms. I thought Matthew in better spirits than he had been lately, and Landis rather thoughtful.

We let the children have their supper first, and get off to bed. Then, when we sat down to our supper there was a chance to talk. Mary opened with:

"You two certainly did have a session. I hope Matthew wasn't too tedious"

Landis regarded her, and shook his head.

"Tedious!" he repeated, "Oh, no. I assure you he certainly wasn't that.

"Tell me Mrs. Gore. Would you, before this set in, would

tive boy?"

you have called him an imagina-Mary considered.

"No," she said, "As a little boy he was very suggestible. We always had to get him out of the room before anyone turned on a tap-but that's not quite the same thing, is it? No, I'd not call him imaginative."

Landis nodded.

"I must admit that to begin with I suspected he had been reading too much fantastic stuff, and was failing to distinguish it from reality. That set me on the wrong track-"

"Actually," I put in, "his taste in fiction runs chiefly to simple adventure-Biggles, and all that."

"Yes. That came clear fairly soon. So I had to change my line of thought-and then go on modifying it again . . ."

Landis toyed for a long pause with the cold meat on his plate. Mary asked, a little impatientlv:

"But what do you think it is?" Landis delayed another mo-

ment or two before he looked up. "Quite frankly, I haven't decided yet. I can tell you what it looks like-though that's sheer nonsense, of course. More than anything I've come across vet, it looks like what our ancestors used to call 'possession'. They would have said quite simply that this Chocky is a wanton spirit, if

not actually an evil spirit, which has invaded Matthew."

"But that being, as you say, nonsense . . .?"

"I don't know . . . One has to be careful not to be as dogmatic in our way as the ancestors were in theirs. It's easy to over-simplify-in fact, that's just what Matthew is doing himself. . . . He says that he 'talks' to this Chocky, and he, she, or it 'talks' to him. He 'hears voices' as the ancestors would say. But that is only a manner of speaking; he uses the word 'talks' because he has no word for what he really means. When he 'listens' to Chocky he is not hearing sounds -there are no words. And when he replies he doesn't need to use words-though he frequently does, particularly when he's feeling worked up, as you know, but he does it because it's his habitual emotional reaction, not because it's necessary. Therefore, his 'hearing' a voice is a metaphorical expression-but the 'conversations' he holds with it are not. They are quite real."

MARY, frowning, said that she derstood.

"Well, now, just think back to some of the questions he has been asking, and things he has said to you and David, Landis suggested. "Wasn't a characteristic of almost all of them that they were naively, childishly expressed?" "After all, he's not quite

twelve," said Mary.

"Exactly. In fact, he has a pretty good vocabulary for his age-but it isn't up to expressing his questions adequately. He knows what he wants to ask, and often understands what he wants to tell-his chief difficulty lies in finding the words to make it clear. "Now, if he were passing-on

questions that he had actually heard asked, he would scarcely be in that particular difficulty, would he? Or, if he had read them in a book he would not have understood them unless he knew the words that were used, but if he did know the words he would be using them himself, instead of finding this trouble with his own limited vocabulary.

"It follows, therefore, that he did not actually hear these questions, nor did he read them, vet he does understand what he's trying to ask-so, how did the questions get into his head without the necessary words to carry them there?" He looked from Mary to me, and back, "Really quite a problem, isn't it?"

"Any more than it always was?" asked Mary, "Words are only names for ideas. Everybody gets ideas. They have to come from somewhere before they can

be named." I knew the tone. It meant that

something—possibly, I suspected, Landis' use of the word 'possession'—had made her uneasy. Landis went on:

BUT take his use of the binary code. If anyone had shown him, or if he had seen it in a book, the odds are that the pairs of symbols used would have been nought and one, or pulsa and minus, or possibly x and y, and he would naturally have used the same pair of symbols himself. But the way he did get them they appeared to him simply as affirmative and negative, a Yes and a No, so he conveniently abbreviated them to Y and N."
"But." Mary aid, impatiently.

"But," Mary said, impatiently,
"If there aren't any words, so
that he isn't listening when he
seems to be, what is going on? I
mean, why the idea of this
Chocky who 'talks', at all?"

"Oh, Chocky exists, all right. Naturally I looked for some personification of his own subconscious, but I've talked to him long enough to be sure it isn't that. But where Chocky exists, and what she is, has me completely beat for the moment and Matthew, too."
"I can understand that for

"I can understand that for him she exists. There's no doubt about that—it's why we've been playing up to it. But—" Mary began. Landis cut her short.

"Oh, she has a much more definite existence than that. Just remember the car incident. No boy of Matthew's age thinks that a brand new model of a modern car is old-fashioned. He thinks it's wonderful. Matthew was proud of it, and anxious to show it off. But, according to David's account, what happened was exactly what would have happened if another child—or anybody else—had been scornful of it.—Except that no other child would have been able to explain how it ought to be radically different.

"And here's another one he told me this afternoon. He was, he said, telling Chocky about the step-rocket system for spaceflights. She laughed at it, just as she had at the car. According to him she called it ludicrous and old-I think he meant primitive. Weight, she told him, was a force, force is a form of energy: it is foolish and wasteful to oppose one form of energy directly with another. First, one should study and understand the nature of the hindering force. Once it is understood, one is able to discover the means either to negate it, or, better still, to make it work for one. Thus the proper way to operate a space-ship is not to try to smash it into the sky with explosives against the whole pull of gravitation, but to develop a means of screening off the pull as you require. "In this way, she explained, by

balancing the centrifugal force

against a reduced pull of gravitation you get a smooth take-off and acceleration. There is no sudden onset of distressing pressure. A reasonably supportable rate of acceleration giving only two or three Gs can be maintained, and that will soon build up to a far greater speed than any rocket could ever attain. By manipulating the gravitysereens you can determine your direction, and increase or decrease the rate of acceleration, as you wish.

ROCKETRY, she told Matthew, was like trying to power a car by clockwork-once the spring has unwound, you've finished; but with-and this was a point where we came unstuck. . . . Matthew couldn't get the concept. He thought it was something like electricity, but he knew it wasn't quite that. . . . Anyway, with this form of energy which the ship could pick up from radiations in space to operate the gravity-screens there was no question of running out of power. The limit of speed that could eventually be reached was that of light. The chief hindrance to efficient space-travel thus became duration. Not only of the journey itself, but even more of the altogether excessive time taken by acceleration and deceleration. Shortening it by increasing the Gs could only give too slight an improvement to bother with—and that at the cost of great strain. The real trouble was that the speed of light was much to slow; it took far too long to be found; the present theory was—but there Matthew lost heapt was considered as the speed of light was provided by the speed of t

Landis leant back, and added:
"Now, with that again I'm
quite satisfied it didn't come out
of books. It could have, perhaps
but it didn't. If it had, he would
not have stumbled about as he
did trying to find words to tell
me 'those parts that were obviously quite clear in his mind."

Mary said coldly; "and all that stuff seemed quite sensible to you —I mean, you feel it did make sense?"

"Let's say that, as far as it keeps within the limits of his understanding, it is logical. One would rather it were not." "Why?" Mary asked.

"Because if there were some slips caused by misunderstandings, or by embroideries of his own that did not fit properly, there'd still be a chance that he concoted it out of things he's read. But as it is he freely admits he couldn't understand parts of it, and appears for the rest to be doing an honest job of reporting."

"So, what's to be done?" I inquired, after a pause. Landis shook his head again.

"Frankly, at this stage I don't know."

M ARY poured the coffee slow-ly. "Are you saying you can't do anything to help Matthew ?"

Landis furrowed his brow.

"Help him?" he said, "I don't know I'm not even sure that he needs help. In fact his chief need at the moment seems to be someone he can talk to about it. He doesn't particularly like this Chocky, in fact she frequently irritates him, but she does supply him with a great deal that interests him. In fact, it's not so much Chocky that's troubling him as having to defend himself by keeping her secret. You two have been his only safety-valve."

"Now you are talking as if this Chocky really exists." Mary protested angrily. "Let's get this straight. Chocky is a convention. It is simply a name for an imagined companion. One understands this up to a point, but carried beyond that it ceases to be normal. Matthew is troubled and he needs help. That's why David appealed to you." Landis considered her for a

moment or two before he replied. "I'm afraid I can't have made

myself clear," he said. "Any resemblence between Piff and Chocky is quite superficial. Piff was a child's subjective invention in a quite familiar pattern. Chocky is not-she is objective. she comes not from inside, but from outside. This is, I admit, a condition that I have never encountered before, either personally, or in the text-books. What I would like to believe is what you wish to believe-and what my training tells me I should: that the whole thing is subjective-an invention of Matthew's own which has got out of hand. But to do that I should have to ignore the evidence. Well, I'm not bigoted enough to twist the facts to suit what I have been taughton the other hand I am not credulous enough to accept the old idea of 'possession', which fits the evidence much better. . . ."

He broke off in thought for some seconds, and then shook his head:

"No. That's not so, either, 'Possession' meant what it said: domination. This is not like that. It's much more like a working arrangement between them. . . ."

"What on earth do you mean by that?" Mary asked.

I RECOGNIZED the tone. Any confidence she may have felt in Landis had shrunk almost

away. He replied: "Well, during the car incident David overheard Matthew telling Chocky to shut up and go away —and apparently, after several repetitions, that's just what she did. Matthew was angry, and certainly he was not dominated. He gave the order; she obeyed.

"I asked him about it. He told me that when she first started to 'talk' to him she would do it at any time. It might be when he was in class, or doing his homework, or at mealtimes, or sometimes at night. Matthew didn't like that; he didn't like his work. or his own interests, being interrupted, he didn't like it when there were other people presentit made them look at him oddly because he found it impossible to pay attention to her and to others at the same time-and he didn't like being awakened in the middle of the night with difficult questions, either.

"So, from what he tells me, he simply refused to cooperate unless she would come only at times when he could give her his full attention. That, incidentally, appears to have given them some trouble because, he told me: 'Chocky's time isn't the same sort of time as ours.' However he got around that, she says, by setting the kitchen timer, and giving her the exact duration of an hour-the timer turned out to be not guite accurate, it seems, but near enough. Thus, with the length of an hour established. she had a scale, and they were able to arrange for her to come

at times when he was not busy—
the times had to suit him, not
her, you notice....

"And, notice too, how practical this was. No element of fantasy at all. Simply a boy arranging that his friend should pay visits only at times that were convenient to him. And friend in the position of having to agree to the terms offered."

Mary was unimpressed. She looked a little contemptuous. She said:

"I don't understand this. When the Chocky business began, David and I agreed that it was better to let this fantasy ride its course, as Betty's Piff did, than to try to make the child suppress assumed it would We soon pass off. We found we were wrong. Instead, it took a firmer hold. I became uneasy. One does not need to be a psychologist to know what the end will be when a fantasy gains the same validity as reality. I agreed to asking you to come because I thought you could help Matthew to rid himself of this fantasy. But, instead, you seem to have spent the day not only in encouraging him in it, but to have become infected with it yourself. I can't feel that can be doing much good to Matthew, or to anyone else."

ONE could not blame her for impatience with an analytical view. Her concern was imme-

diate: Matthew was in trouble, she wanted him out of it. She had looked for help from Landis; all she had got was a dissertation on an interesting case, and an admission that it baffled him. By the time he left, she had an air of considering him little better than a charlatan.

\* \* \*
The following evening after

we had cleared the table, and the children had gone upstairs. Mary sat down, a little more upright than usual, and addressed the fireplace rather than me. "Matthew didn't go to school

today," she announced.
"Oh, What's the matter?"

"Nothing—well, I mean nothing of that kind. He didn't go because I decided to take him to see Dr. Aycott."

She paused, with a faint air of challenge. I did not accept it. "About the Chocky business?"

"About the Chocky business" I suggested.

"Yes," she said.

"Well, I've nothing against old Aycott as a measles-spotter and cut-stitcher," I told her, "but I can't feel that this kind of thing is quite up his street."

"It isn't," Mary admitted. "All I wanted was a recommendation to the right kind of specialist. Naturally, I had to explain things a bit, but I never intended to ask the old fool for an opinion."
"But he gave you one?"

"Oh, yes indeed. All Matthew

needs is plenty of exercise, cold bath in the morning, plain, unseasoned food, lots of salads, and the window open at night," she told me, with some bitterness. "I'm sorry." I told her.

There was a pause. Mary broke

it. "David, we must help him

somehow."
"Darling, I know you didn't take to Landis, but he is highly thought of, you know. He would not say that it was doubtful whether Matthew needs help if he didn't mean it. We've no warrant to assume that just because this thing is unusual it's harmful. I'm sure he saw no cause for alarm on he'd have said so."

"I don't suppose he felt any. Matthew isn't his boy. He's just an interesting case under observation: if he were normal he'd no longer be interesting."

I DECIDED not to argue anymore for the time being. The question of what to do remained with us. For my part, I favored more contact with Landis, in whom Matthew clearly felt able to confide. But knowing Mary's feelings about Landis, it would be open opposition which only a critical situation could justify. In the meantime, I did suggest to Matthew that as Mummy didn't seem to care overmuch for Chocky it might be a good idea to keep her rather in the background.

On an evening about a month later, Mary went over to the bureau and came back holding some sheets of paper, about twelve inches by eighteen. She handed them to me without a word, and went back to her own chair.

I looked at the sheets. They

were water-color paintings. The first two were landscapes with a few figures. They had the quality of our district, though I could not identify the viewpoints. The figures were somewhat odd, the cows square and lean, and the human beings, while not conventionalized into stick-men, decidedly lacked bulk, and had a pronounced angularity. But, for all that, there was life in them. The coloring was somewhat sombre. being much concerned with shades of green. The drawing was economical and firm. I know next to nothing of painting, but I did feel that to indicate so much by so little was true accomplishment.

The next two were more domestic. One was a vase of flowers—not as a botanist would see them. The other a view through a window. This I could recognize. It showed a corner of a playground, with figures that, again, were spindly.

Finally there were a couple of portraits. In one long, severeplaned face I—well, I won't say recognized, it was more like catching an implication, that this was intended for myself. Not flattering: my eyes are not at all like traffic go-lights, really. The other portrait was of a woman; not Mary, nor anyone I could identify. I laid them down on my knees.

"You understand these things better. Would you call them good?" I asked.

"Yes," she said. "They're odd, but there's perception there, and a sureness of line." She added: "It was accidental. I was cleaning. They were behind his chest of drawers..."

I looked down at the top one. "Perhaps one of the children in his class—or the art teacher..." I suggested.

She shook her head. "Her stuff's not like that—I've seen it."

I reconsidered a couple of the pictures again.

"You could put them back tomorrow, and just say nothing."
"I'd rather he told us about

them."

I demurred:

"Darling. I'm afraid you won't like it, you know."

"I've not liked any of it—even before that friend of yours started talking about 'possession'. But I'd rather know than just guess. It's possible somebody did give them to him."

I WENT into the hall, and called

1 Matthew down.

The moment he came in he spotted the pictures. His eyes went to Mary's face, uneasily.

"Matthew," I said. "Mummy came across these when she was cleaning your room. We think they're rather good. Are they yours?"

"Oh, yes," he told me, a little too eagerly.

"What I mean," I said, "is did you paint them?"

This time there was a hesitation, followed by a slightly defensive:

"Yes, Daddy."

"They aren't much like your usual style, are they? I should have thought you'd get higher marks for these than you usually do in Art."

Matthew shuffled a little.
"I was trying a new way." he

said. "Miss Soames doesn't much like it, but I think she'll give me better marks this term." "She ought to," I said. "You

certainly seem to be seeing things in quite a different way." "Yes," said Matthew, and ad-

ded hopefully. "I expect it's on account of growing up."

His eyes looked at me, pleading. After all, I had told him to be discreet.

"It's all right, Matthew. We only want to know who really did them."

He hesitated, shot a nervous glance at Mary, then looked down at the carpet in front of him. "I did," he said, and then, after a pause, qualified that. "I mean sort of—Well. I did do them."

I didn't want to prompt him. It was Mary who came to his rescue.

She put an arm round him.
"It's all right, darling. It doesn't
matter a bit. We just wanted to
know. That view there, did it
really look like that to you?"

Matthew hesitated again, then, half-blurting, he told her:

"I did do them, Mummy, really. Why they look sort of funny is because that's how Chocky sees things."

H<sup>E</sup> glanced at her anxiously, but Mary's expression showed only interest.

"Tell us about it, darling," she encouraged him.

encouraged him.

A relieved look came over

Matthew's face. He said: "It happened one day after Art class. Miss Soames didn't think much of what I'd done-I don't seem to be much good at Art," he explained. "And Chocky didn't think so, either. So I said I did try, but it just didn't happen right, and Chocky said it was because I didn't look at things properly. So I said I didn't see where properly came into it, you either look at things, or you don't: and she said, no, it wasn't like that because you can look without seeing, if you don't do it properly. Then we argued a bit

because it didn't seem sense. "In the end she said what

about trying an experiment—me doing the drawing, and her doing the seeing. I didn't see how that could work, but she said she thought it was worth trying, so we did

"It didn't come off the first few shots because I couldn't think of nothing. The first time you try. it's awfully hard to think of nothing; you sort of keep on thinking of not thinking of anything, and that isn't the same, so it doesn't work. But that's what she said: just sit and hold the pencil and think of nothing. Then about the third time I half-managed it for a minute or two, and then it got quite easy. So now I've only got to sit down with the paints and-well, sort of switch off me, and the picture comesonly it comes the way Chocky sees it, not the way I do,"

MARY was keeping her face non-commital. Her concern lay behind her eyes. I said:

"I think I see what you mean, Matthew. But I should think it feels a bit funny, doesn't it?"

"Only the first time," Matthew said. "After that it's like—" He paused for some moments to consider what it was like. "Well, it's a bit like riding a bicycle no hands—only not quite because it's Chocky doing the steering, not me. Sort of difficult to explain," he added, apologetically.

I could appreciate that it would
be. More on Mary's account than

on my own I asked:
"It doesn't ever happen when
you don't want it to?"

"Oh, no. I have to make it happen by thinking of nothing. Only now I don't have to think of nothing all the time. The last two pictures I could watch my hand doing it—so all the real doing of them is mine. It's only the seeing that isn't."

"Yes, dear," Mary said. "We understand that. But do you think it is a good thing to do?"

"I don't know, Mummy. They are better pictures than when they're all mine, even if they are a bit funny," he admitted, candidly.

"That wasn't quite what I—"
Mary began. But then she
changed her mind and broke off.
"It's getting late," she said, with
a glance at me.

"That's right," I said. "Time you were in bed, Matthew. Thanks for telling us about the pictures. May we keep them down here a bit so that we can look at them again?"

He agreed to that, with admonishments not to lose them, wished us goodnight, and ran away upstairs.

away upstairs.

We sat looking at one another.

Mary said: "I don't like it,

David. This—this whatever it is,
is getting more real to him. He's

beginning to let it take control of him now. I don't like that at all."

I shook my head.

"It doesn't seem to me quite like that. He was pretty emphatic that he is the one who decides when and whether it shall happen at all," I pointed out.

"Naturally he'd think that," she said.

I tried again to quiet her anxiety. Matthew wasn't unhappy about it, not a bit. He'd had the sense not to tell any of his young friends about it. He really was just an ordinary boy of his ageplus something he called Chocky. And we really didn't have a scrap of evidence that this Chocky was doing him any harm. . . .

I might just as well have saved my breath. . . .

FOR our holiday that summer we took a cottage jointly with Joe and Phyl Deacon who were old friends, with two children much of an age with ours.

The place was Bontgoch, a village on an estuary in North Wales, where many of the inhabitants are seasonal and mostly addicted to messing about in boats. We were perhaps a little odd

there in not having even one boat amongst us, but for all that we enjoyed it. There is plenty of sand at low tide where the children could dabble around and

catch shrimps and flat fish. On both sides of the estuary are nottoo-steep mountains to climb. dotted here and there with old workings fascinatingly reputed to have been gold mines. It was good to be able to go off in the car for a day and leave the Deacons in charge-quite good, too, to take charge while the Deacons seized their chance. Everything. in fact, was a great success, until the Monday of the second week,

On that day it was Mary and I who were free. We drove almost off the map by very minor roads, left the car, and went on along the hilltops to picnic by a stream. In the evening we had dinner at a roadside hotel, and dawdled back into Bontgoch about ten o'clock.

One had only to put a foot on the threshold of the cottage to know that something had gone wrong, Mary stared at Phyllis Deacon.

"What is it?" she said. What's happened?"

"It's all right, Mary," Phyllis said. "They're quite safe, They

are upstairs in bed. Nothing to worry about." "What happened?" Mary said

again.

"They fell in the river, But they're quite all right."

She and Mary went upstairs. Joe Deacon started to pour out a

couple of whiskies.



"What's been going on, Joe?"
I said, as he held out the glass.
"It's quite all right now, as
Phyl says," he assured me. "Near
as a toucher to a tragedy, though,
Shook me rigid, old boy, I can
tell you. Not stopped sweating
yet. Cheers!"

"But what happened?" I repeated.

He set down his glass, and explained:

"Pure accident, old man. They were all four of them playing around on that ricketty landing stage. The tide was just past the turn and running out. That hulking motor-boat of Bill Weston's was moored about fifty yards upstream of them. According to old Evans who saw the whole thing it must have broken its mooring line. He says it came down too fast to be dragging. Anyway, it socked the far end of the landing-stage full tilt, and the end collapsed. My two were back a bit, so they were only knocked down, but your two went straight into the water. . . .

W ELL, you know the way it runs on the ebb. They were yards away in a few seconds. Old Evans saw them come up. At first he thought Matthew couldn't swim, by the way he was splashing, but then he saw him strike out towards Betty. He didn't see any more because by then he was on his way for help.

"It was Colonel Summers who went after them, but even with that fast motor boat of his they were something like a couple of miles downstream before he found them. Matthew was still swimming, and still supporting Betty.

"The old boy was tremendously impressed. He says that if ever he saw anything that deserved a medal, that did; and he's going to make sure Matthew gets one.

"We were in here. My two never thought to tell us until they'd seen the Colonel's boat chase off. Not that I could have done anything. . . But, lord-ohlord, waiting for him to come back. I hope I never have to spend an hour like that again.

"Anyway, it came out all right, thank God—and thanks to young Matthew. There's no doubt your Betty'd have been a goner, but for him. That boy must be a pretty powerful swimmer for his age. I'd no idea, Anyway, here's all the very best to him—he deserves it. "The Colonel's putting him up for a medal you know."

Joe finished off his drink at a gulp.

I finished mine, too. I needed it. Everybody ought to be able to swim. It had worried me for the last year or two that Matthew could never succeed in swimming more than three consecutive strokes. . . . .

I WAS shushed away from the I room Betty shared with the Deacon girl.

"She's asleep," Mary told me. "She's got a nasty bruise on her right shoulder. We think she must have hit the boat as she fell. Otherwise she seems all right. O,

David. . . .!"

"It's all right, darling. It's all over now. . . . "Yes, thank God. . . . But.

David, how did Matthew ever do it . . .?"

I looked in on Matthew. The light was still on. He was lying on his back staring at it. I had time to catch his worried expression before he turned his head and saw me. "Hullo, Daddy," he said.

Momentarily he looked pleased and relieved, but the anxious ex-

pression soon came back. "How are you feeling, son?" I

asked. "All right," he said. "We got

jolly cold, but Auntie Phyl made us have a hot bath."

I nodded. "I've been hearing great things about you, Matthew." I told him.

His anxious look increased, His eves dropped, and his fingers began twisting at the sheet. He looked up at me again.

"It's not true, Daddy," he said,

with great earnestness. "It did make me wonder." I

admitted. "A few days ago you couldn't swim."

"I know, Daddy. . . ." Again he twisted at the sheet. ". . . But Chocky can. . . " he said

"Tell me about it." I suggested.

"Well, it all happened terribly quickly. I saw the boat just going to hit, and then I was in the water. I tried to swim, but I was frightened because I knew it'd be no good, and I thought I was going to be drowned. Then Chocky told me not to be a fool and not to panic. She was sort of fierce. She sounded rather like Mr. Trimble when he gets angry in class, only more, and I was so surprised I stopped panicking. Then she said: 'Now think of nothing, like you do with painting.' So I tried. And then I was swimming." He frowned. "I don't know how, but somehow she made my arms and legs go the right way to swim. just like she makes my hands go the right way to draw. It was her, not me, that was doing it, Daddy."

"I see," I said-which was a considerable overstatement. I reflected for a few moments, "And so when you found you could swim, you struck out for the shore?"

Matthew stared at me.

"I couldn't do that. Betty had fallen in, too."

I nodded again.

"That does rather seem to me to be the point," I said.

"But it was Chocky that did it," he asserted, obstinately,

Matthew looked at it gloom-ily, a lower lip a little out. In a small red-leather box it gleamed from a bed of blue velvet. The obverse was a trifle florid, with the Society's name in full round the edge, then a band of involved, and possibly symbolic, ornament, and, in the center, a boy and girl standing hand in hand regarding a sun which one presumed from its wealth of radiation to be rising. The reverse was plainer: within a wreath of leaves, and under the inscription 'For a Brave Deed', was engraved 'Matthew Gore', and the date. "I don't want it," he said mis-

"I don't want it," he said miserably.

Mary and I caught one anoth-

shary and I caught one another's eye. It was hard to know what to say. Neither of us tried. "It's not fair," Matthew said. "It's Chocky's—she saved me, and Betty. . . . It's not true, Daddy."

"Well, we can't send it back not without telling everybody about Chocky. And I don't think they'd understand very well about her if we did." I said.

Matthew kept on looking at it. I thought he was going to cry. I felt a poignant memory of those far-off patches of desolate disilusion that had been the shocks of growing up. The discovery that one lived in a world which could pay honor where honor was not due, was just such a one. The values rocked, what had been

solid showed hollow, the dependable became flimsy, every golden thing was, for a time, reduced to brass. . . .

Matthew turned away abruptly, and ran out of the room. The medal, gaudily shining in its case, lay on the table, between us.

We looked at it for nearly a minute. Then Mary reached across and closed the case. Our eyes met for a few seconds, then she picked it up and took it away with her. . . .

THAT evening there was a light tap on my study door. The time was nearly eleven. Mary had gone up, and I had stayed down to write some letters. Instead of calling, I put down the pen, and went to open the door. Matthew looked up at me. He had a slightly conspiratorial air, so I closed the door behind him before I spoke. "Come on in. Sit in the big chair, it's warmer there."

He climbed into it and curled up, looking as if he had lost two

or three of his recent years.
"What is it, old man?" I asked.
"If it's that medal that's worry-

ing you—"

He shook his head.

"No, Daddy, it's not that. It's

things."

about Chocky, you see."
"What's the trouble with

"What's the trouble with Chocky this time?"

"Oh, it's not trouble. It's that she wants me to tell you some

I reached for a cigarette, lit it, and leaned back in my chair. "All right. I'm all attention.

Tell her to go ahead."

But Matthew's expression had become abstracted. He did not appear to hear. He became aware of my watching him.

"Sorry, Daddy, just a minute," he said, and reverted to his look of abstraction. His changes of expression and the small movements of his head gave me a feeling of watching one side of a tel-vised conversation, with the sound cut off. It ended by him nodding, and saying audibly: "All right. I'll try," but rather doubtfully, I thought. Looking at me again he explained:

"Chocky says it'll take an awful long time if she has to tell me and then I have to tell you because sometimes I can't think of the right words for what she means; and sometimes they don't quite mean it when I can, if you see what I mean."

"I do." I assured him. "Lots

of other people have the same sort of difficulty at the best of times. And when it's a kind of translation, too, it must be quite hard work."

"Yes, It is," Matthew agreed, decidedly. "So Chocky thinks it would be better if she talks to you herself."

"But can she do that?"

"Not the way she talks to me. I don't understand why, but she says it only works with some people. So she wants to try and see if we can do it another way."

"What other way?" I asked.
"Well, me talking but sort of
letting her do it—like the paint-

ing, and the swimming," he explained.
"Oh," I said doubtfully. I felt

at sea, uncertain what was implied, and whether it ought to be encouraged. "I don't know. Do you think—?"

"I don't know," he said. "But Chocky's pretty sure it'll work okay, so I expect it will. She's usually right about things like that."

THAT appeared to settle it. Before I could get my feelings of misgiving into shape, he had leaned back in the chair and closed his eyes.

I was uneasy, with a feeling that I had been rushed into taking part in something suspiciously like a séance, and that I ought not to have allowed it to happen. I leant forward.

"Look here, Matthew—" I began, and then hesitated as his eyes re-opened. They were not looking at me, nor, seemingly, at anything else. His lips parted, too. They came together two or three times without a sound, then his voice said:
"I am Chocky who is talking."

There was no air of séance, about it, and nothing of the medium, no pallor, no change in breathing, about Matthew. He lay back in the chair with his feet tucked up on its seat, relaxed and apparently quite himself-except for the unfocussed look in his eyes. The voice was his usual voice. It went on: "I want to explain some things

to you. It is not easy because I can use only Matthew's"-there was a slight pause-"vocabulary. which is simple, and not very big, and has some meanings not quite clear in his mind, but I will try."

The voice was characteristically Matthew's, but the delivery and style were not. There was more than enough difference to abolish any idea that Matthew himself might be trying a hoax. Yet the implication was not easy to accept while he sat there looking so much his usual self. In fact, the very attempt gave one a half-foolish, half-eerie feeling, of being in a kind of charade. Nevertheless, my curiosity was strong enough for me to say:

"Very well. I'll do my best to

understand."

"I want to talk to you because I shall be going away quite soon. The other part of his parent will be glad to know I am going: it does not like me and is afraid of me because it thinks I am had for Matthew. Your part doesn't not-like me quite so much, but I think you will be a bit glad, too. I am sorry about the other part. I haven't done any harm to Matthew-"

"Just a minute," I put in. "Let's take it a bit slower. And if by 'the other part' you are meaning my wife would you be so kind as to stop referring to her as "it"

"All right. I'll try to remember, but these genders are difficult for me. I don't see why you want genders at all. It's not natural for a parent to be split into two parts. What's the good of it? I'm sure it must be very bad for children-"

"Yes, yes," I interrupted, "Matthew told me your views on that. Possibly they're right, but they're not much good to us. We're used to the way we've got, It not only suits us, but we consider it rather important. In fact, it has been said that it's the naural - er - affection between these genders that makes the world go round."

There was a pause. Then the Chocky-Matthew voice said:

"But that can't be right, All worlds go round. Ours does, and we haven't got any of these genders. What makes the worlds go round is-" "Oh. never mind," I said.

"Skip it. Let's get on to what

it is you want to tell me." "It's simply that I've finished here now. I shan't come any more. I think it would be a good thing for you to tell the other part, I mean your wife, that I really have gone. You see, sometimes she hates me, but other times she thinks I'm not me at all, but just something that is wrong with Matthew. And that's started to worry Matthew a lot because she's not like she used to be to him, and he thinks she's beginning to be less fond of him -Oh dear, I wish he had better words for me to use. Do you understand?"

CO when she knows I've gone, and she's guite sure I shan't come back, and you've explained all about me to her, then she won't worry any more about Matthew, so he won't be worried about her."

"I'm sure it will be a great relief to her-if I can convince her." I agreed, "But as for 'explaining all about' you, what am I to say. What are you? Where did you come from? Why." "I'm telling you, I am here

because I am learning to be a scout."

"A what."

"A scout, I think-or is it a spy? No. a scout. Somebody who goes to find out what places are like. I have been finding out what Earth is like."

"Have you indeed! Why?" "To see whether it would be

any good for us. You see a ship that can only go the speed of

light takes a long time to get anywhere. So it would be a great waste to send it to a planet which turned out to be no good .- Oh, I do wish Matthew had more words. I could explain much better."

"Never mind, I'm following, I think.

"So a scout comes this way. Because there is no-oh, dear, I made him look it up, too-No?-Mass! Because there's no Mass. it takes no time, you see. Then he goes back and makes a report. and they compare it with other scouts' reports, and if it looks like a good planet for a colony they send off a ship to it."

"Which is going to take centuries on the way, so we needn't expect it just yet?"

"Oh, this planet isn't any good to us. Only one in thousands is. This is much too hot, too much dry land, not enough wet landlots of reasons. I could tell that straight off."

"That sounds a good reason for going away again straight

off." I suggested. "But I had to stay and find out

things so that I can make my renort. Then when they compare that with the other reports on Earth they've got they'll be able to tell whether I'd make a good scout, or whether I'd better do something else."

I sat looking at Matthew. He was still lying back relaxed in his chair. His eyes still had that blank unfocussed gaze. I tried to offset the feeling of dream-improbability with a firm matterof-factness.

"Now, listen," I said. "Have! got this right? Are you trying to tell me that you are here simply as part of some kind of a—a vocational aptitude test? Are you implying that we—I mean the Earth and what's on it—are the —well, the fieldwork for some kind of exam you're having to take?"

"Yes, that is what it is really,"
the Chocky-Matthew voice
agreed, but it added despondently: "I'm afraid it won't be much

good, though. I don't think they are going to think it is my—my vocation." I inquired why.

I inquired why.

FROM an explanation rendered somewhat roundabout by the limitations of Matthew's vocabulary I gathered it was a matter of attitude. A scout, it seemed, should preserve detachment. The job was to observe both widely and intimately, but without developing engagement. Engagement of one's sympathies brought prejudice into evaluation of the facts, and thereby falsified one's conclusions.

Chocky had understood this well enough, but the preservation of detachment did not appear to be one of her gifts. Forms of engagement had seemed to lie constantly, and stickily, in her path. For instance, after observing that Earth was a very queerly arranged and backward place, she had allowed herself to feel impatient with it, which was bad; and she had even let these feelings be known, which was worse. The proper scout temperament would not have let itself get into arguments with Matthew, nor have been tempted into saving disparaging things about the local inhabitants and their artifacts. It would have noted that Matthew was incompetent with his paints; but it would have resisted the urge to try to help him to do better. It would have taken care to keep its influence down to the least possible minimum. Quite certainly it would not have permitted itself to develop an affection for Matthew which could lead to actual interference with the natural course of events. . . . There was, Chocky felt, going to be trouble when 'they' learnt about that. . . .

about that...

I inquired why it was ahe had chosen Matthew, in particular, for her means of observation. She explained that some minds make easy contacts, and others do not, Matthew's had seemed suitable. It was wisest, for any but a very experienced scout, on any planet to choose a young life-form as a contact. Adults, as a rule, were very easily frightened if one tried

to make contact with them. They usually thought they must be going mad, which was unsatisfactory for both parties: children, on the other hand, were making surprising discoveries about their world every day, so they didn't find anything alarming about it if one used the right approach. It gave a limited field of observation, of course, but you did get co-operation.

THE mistake she had made with Matthew was being in too great a hurry in asking questions, and becoming impatient with absurd practices, like the system of counting in tens, and so on. If she had been more patient we should just have gone on thinking she was imaginary. In that case, the other half of his parent would not have begun to think there was something seriously wrong with him, and Matthew himself wouldn't have become troubled because she did.

The whole thing indicated pretty clearly, she was afraid, that she was not really cut out to be a scout. She did not suppose 'they' would let her even try again after the mess she'd made of this first test. . . . . I tried to find out where 'they'

lived, where she came from. That landed us in a lot of difficulty; first we had trouble in finding the word 'dimension', which was missing from Matthew's glos-

sary, and then it did not help very much when we had it. She tried an involved simile about a telephone making it possible for two people to be in touch without either needing to know, geographically, where the other was, A bit like that, she said, though rather different, too. 'They' apparently chose the planet and fixed up the settings, or co-ordinates, or whatever it was that would get you there; you yourself added your own local indicators when you had found a suitable contact; once that was fixed, you could make the connection whenever you wanted to. She and Matthew had wanted to work out their relative positions in ordinary three-dimensional space, but didn't know where to begin.

There was a point at which I asked flatly:

"But what are you? I'm sure I'd find this easier if you had some kind of form in my mind. Now, suppose I were to give Matthew a pencil and paper would you have him draw a picture of you?"

There was a pause after that, but then it was followed by a 'No' that was quite decisive.

Even with training, she explained, she still sometimes saw Earth people as queer, narrow, crudely jointed, rather repulsive creatures. When she allowed herself to do that, it made a barrier

because she lost respect for them as people and found it hard to believe that such shapes could house real minds at all. She had no doubt that it would work just as strongly the other way round, and with us, who were not trained at all, she was determined not to risk it.

Besides, she added, she was going away now. All she wanted was for me to understand what she had told me so that I could explain it to the other part of the parent, for Matthew's sake.

THINK I have the general idea well enough, Chocky," I said, "but I'll be fair with you. I can't go telling her all that you've told me-not for a very long time, at any rate. If I were to she'd certainly think I was at least slightly mad-and that would simply make things worse all round. You see, a thing of this kind is very hard for people like us to take. . . I think it will be a lot easier for her if we let her think it was a phase Matthew was passing through. But there is one thing she'll never forgetthat some mysterious force did give Matthew the power to swim when he needed it, and because of that, he and Betty are still alive. So, once she's quite sure you've gone, I don't think it will trouble her if Matthew likes to call that mysterious force, 'Chocky'. . . .

MATTHEW'S eyes were redrimmed when he arrived at breakfast in the morning. He sat silent, and doodled uninterestedly with his cornflakes.

"Eat them up now. You're going to be late for school if you don't," Mary told him.

He kept quite still for a moment, then he looked up, not at Mary, but at me. He swallowed

a couple of times, with difficulty. "She's gone, Daddy," he said tremulously. "She's gone for always."

Then the tears overflowed, and he fled.

I was left with the job of trying to make it sound sensible to Mary.

That evening Matthew again

appeared at my study door. His expression was still a little-mournful, but the first stress had eased. In one hand he was clutching a small red-leather box.

"Daddy, I've had a good idea," he told me. "Can you alter these?

I mean could someone take my

name off it, and put Chocky's instead, if I wanted?"
"I should think so. Is that what you do want, Matthew?"
"Yes please. Daddy."

"Very well," I agreed. "You know, I think you're right, Matthew. It is a good idea. We'll take it along to a shop tomorrow, and tell them what we want."

THE END

He believed the old tales, the weird tales . . .

They festered in his mind . . . and he dreamed of

how he would use . . . how passionately he would use . . .

### THE BORGIA HAND

By ROGER ZELAZNY

Illustrated by ADRAGNA



THE pedlar passed through town the day the blacksmith died. That day the boy had been walking in the hills above Braunau, studying the moist foliage and the departing thunderheads, so he did not hear of the visit until evening.

When Fritz, his best friend, told him, the boy looked down at his withered right hand and great tears welled into his eyes. "I have missed him! Now I

"I have missed him will never be a man!"

"Nonsense!" laughed Fritz.
"It is only a fairy tale. You can't really believe that story!"

"It rained today-and the

smith had great muscles. I have missed him!" Fritz looked away from his

friend's face.
"He was buried before he grew

cold. The body was not displayed—but, surely, there can be nothing to the story . . ."

"Did his widow rush to the

bank?"
"Yes, there was some business concerning his estate. But—"

"Which way did he go?"
Fritz gestured up the road.

"How long ago?"

"Five or six hours."
The boy ran all the way home.

to get his savings.

The dark sack of the pedlar was a sleeping animal at the foot of the great oak. The man with the floppy hat and the brown cloak sat upon a rock, pipe in hand. He watched the trail behind him, as the boy laboriously threaded his way among the rocks and roots.

"Good evening, grandfather," puffed the boy, throwing himself to the ground.

"Good evening, boy," smiled the pedlar. "I am not your grandfather, nor anyone else's."

father, nor anyone else's."

"I know," panted the boy. "I know who you are."

"Oh?" He tamped more tobacco into his pipe and relighted it. "Suppose you try naming me."

The boy sighed, massaging his right hand with his left. "You have more names than this tree has leaves. But first I'll try Ahasuerus, harbinger of storms, and Prince Cartaphilus, the much-beloved, then Isaac Laquedem. the pedlar—"

"Stop!" said the man. "Do not repeat them all in my presence. It might prove fatal." He regarded the boy with interest.

"Names have a certain virtue —yours, for instance, is too long. Someday you shall change it."

"I didn't follow you in order to discuss names," said the youth, "and I didn't mention mine. I came to strike a bargain."

The pedlar glanced at his sack. "Pans, pots, thread, needles?"

The boy laughed, shaking his

"The smith had great muscles. What did you buy, his biceps?"

"What makes you think I deal in anatomy?"

"The old stories," began the boy, "They can't all be wrong, When Isaac was cursed to walk the earth forever, he was given eternal life without eternal youth. Over the centuries he mastered the art of transplanting fresh muscles, organs, and bones, to replace his aging ones. I know what you have in that sack!" He jerked his head toward the base of the oak. "Sometimes you strike a bargain with a mortal. and sell someone a new foot, a mighty arm, an eye that can see, or a new hand . . ."

THE boy stared for a long while at his useless fingers.

I while at his useless fingers.

"Do you need to ask that question? I cannot use my own, and

do vou want a new hand?"

"I see," said the pedlar, "Why

I want one that works."
"I suppose you want one with
the powerful wrist of a fencer, to

duel at the universities?"

The boy shook his head. He stood.

"No, ageless one, I don't want

to duel. I do not know whether

you are a servant of God or the devil, but I will pay you whatever you sak for a hand that can reach this high and still work." He pointed with his left index finger at a spot above his head. "Put such a hand on this wrist," he gestured, "and I will give you my soul, if you ask it."

"Do not be so hasty to dispose of your soul, boy," said the pedlar.

He crossed to the foot of the oak, his face obscured by pipe smoke and evening.

"I do have a hand here, one

which has written many pages of history." He tugged a cord and the sack

He tugged a cord and the sack suddenly yawned, like an awakened snake.

"What will you do if you have a new hand, and can raise it this high?" He threw his own hand up over his head. "I shall paint," said the boy, "my city, the mountains, the trees, the people, sunrises, sunsets . . . I shall make them all mine! On canvas."
"Franch" interrupted the

"Enough," interrupted the pedlar. "I see that you would be an artist." He dipped his hand into the sack, and the boy thought he saw an unnatural shimmering within its dark interior. Then he drew forth . . . .

A hand!

A right hand. Pink. Smoothcut at the wrist, as though freshly-severed from an arm—though no blood ran. A small, strong hand.

The boy gasped, then he

stepped behind the great oak and was sick. Stepping back into the clear-

ing, he asked, weakly, "Can you really put it on my arm?" "Of course, if you want it."

"Of course, if you want it."
"Certainly I want it! Why shouldn't I?"

"Some people," said the pedlar, "are so vitally alive, that they invade every atom of their being with the sheer intensity of their wills, their purposes. I wondered, for a long time, whether this power could be communicated.

"This hand," he waved it, "belonged to Caesare Borgia. He was an artist, true. But he was many other things. I stole it on the day he died, in order to perform an experiment. Years ago, while travelling in Corsica. I cave it to a boy with a condition similar to yours. You know his name. I think even he was a little afraid of the hand, because he generally held it out of sight. I had to journey to St. Helena to retrieve it, but I still haven't proved anything. One trial is never sufficient."

"I am not afraid of the hand," said the boy, "and I will be an even greater artist in my way than Bonaparte was in his. How much do you want for it?"

"It cost me nothing. I will

transfer it to you for nothing, since you know the story and are not afraid."

The boy rolled up his sleeve and smiled.

"It's a deal Put it there"

The pedlar laughed, seizing the useless hand he extended.
"It will not take long." he said.

"and someday I shall return to the land of Luther and Goethe, to see how you have raised it." "High!" cried the boy, eyes

blazing.

### COMING NEXT MONTH



A startling novel-complete in one issue-headlines the April AMAZING. Its title: Begcon to Elsewhere, Its author: James Schmitz, From the outset, when a Federation policemen lands on Terra to trace a stolen shipment of a secret chemical, to its climax, when cosmic forces shatter the continuum and man confronts alien over incalculable distances of space and time, this will be a story you cannot stop reading. Finlay's cover (1.) illustrates it.

Also in the next issue of AMAZING is a Sam Moskowitz SF Profile of Lester del Rey; short stories chosen from

those we have on hand by Bone, Bunch and others, plus all our regular features.

Be sure to get the April AMAZING , on sale March 7.



Four walls do not a prison make unless they look out upon a world that doesn't exist anymore.

By KEITH LAUMER

Illustrated by SCHELLING

# WALLS



Harry Trimble looked pleased when he stepped into the apartment. The lift door had hardly clacked shut behind in on the peering committer faces in the car before he had slipped his arm behind Flora's back, bumped his face against her cheek and chuckled, "Well what would you say to a live surprise? Something you've waited a long time for?"

Flora looked up from the diala-ration panel. "A surprise, Harry?"

"I know how you feel about the

apartment, Flora. Well, from now on, you won't be seeing so much of it—"

"Harry!"

He winced at her clutch on his arm. Her face was pale under the day-glare strip. "We're not —moving to the country . . ?"

Harry pried his arm free.
"The country? What the devil
are you talking about?" He was
frowning now, the pleased look
gone. "You should use the lamps
more," he said. "You look sick."
He glanced around the apartment, the four perfectly flat rectangular walls, the glassy surface of the varigiow ceiling, the
floor with its pattern of sinkaway panels. His eye fell on the
four foot square of the TV
screen.

"I'm having that thing taken out tomorrow," he said. The pleased look was coming back. He cocked an eye at Flora. "And I'm having a Full-wall installed!"

Flora glanced at the blank screen. "A Full-wall, Harry?" "Yep!" Harry smacked a fist

"Yep!" Harry smacked a fist into a palm, taking a turn up and down the room. "We'll be the first in our cell block to have a Full-wall!"

"Why—that will be nice, Harry . . . "

"Nice?" Harry punched the screen control, then deployed the two chairs with tray racks ready to receive the evening meal.

BEHIND him, figures jiggled on the screen. "It's a darr sight more than nice," he said, raising his voice over the shrill and thump of the music. "It's expensive, for one thing. Who else do you know that can afford—" "But—"

"But nothing! Imagine it, Flora! It'll be like having a . . . a balcony seat, looking out on other people's lives."

"But we have so little space now; won't it take up-"

"Of course ...t! How do you manage to stay so ignorant of technical progress? It's only an eighth of an inch thick. Think of it: that thick. Think of it: that thick." Harry indicated an eighth of an inch with his fingers—"and better color and detail than you've ever seen. It's all done with what they call an edge-excitation effect."

"Harry, the old screen is good enough. Couldn't we use the money for a trip-"

"How do you know if it's good enough? You never have it on. I have to turn it on myself when

I get home."

Flora brought the trays and they ate silently, watching the screen. After dinner, Flora disposed of the trays, retracted the table and chairs, and extended the beds. They lay in the dark. not talking.

"It's a whole new system," Harry said suddenly, "The Fullwall people have their own programming scheme; they plan your whole day, wake you up at the right time with some lively music, give you breakfast menus to dial, then follow up with a good sitcom to get you into the day: then there's nap music. with subliminal hypnotics if you have trouble sleeping; then-" "Harry-can I turn it off if I

want to?"

"Turn it off? Harry sounded puzzled. "The idea is to leave it on. That's why I'm having it installed for you, you know-so you can use it!"

"But sometimes I like to just think-"

"Think! Brood, you mean." He heaved a sigh. "Look, Flora, I know the place isn't fancy. Sure, you get a little tired of being here all the time; but there are plenty of people worse off-

and now, with Full-wall, you'll get a feeling of more space-"

"Harry-" Flora spoke rapidly-"I wish we could go away. I mean leave the city, and get a little place where we can be alone, even if it means working hard, and where I can have a garden and maybe keep chickens and you could chop firewood--"

"Good God!" Harry roared, cutting her off. Then: "These fantasies of yours," he said quietly. "You have to learn to live in the real world, Flora, Live in the woods? Wet leaves, wet bark, bugs, mould; talk about depressing . . ."

There was a long silence.

"I know; you're right, Harry," Flora said. "I'll enjoy the Fullwall. It was very sweet of you to think of getting it for me."

"Sure," Harry said. "It'll be better. You'll see . . ."

THE Full-wall was different, Flora agreed as soon as the service men had made the last adjustments and flipped it on. There was vivid color, fine detail, and a remarkable sense of depth. The shows were about the same -fast-paced, bursting with variety and energy. It was exciting at first, having full-sized people talking, eating, fighting, taking baths, making love, right in the room with you. If you sat across the room and half-closed your eyes, you could almost imagine you were watching real people. Of course, real people wouldn't carry on like that. But then, it was hard to say what real people might do. Flora had always thought Doll Starr wore padded brassieres, but when she stripped on Full-wall—there wasn't any fakery about it. Harry was pleased, too, when

Harry was pleased, too, when he arrived home to find the wall on. He and Flora would dial dinner with one eye on the screen then slip into bed and view until the Bull-Doze pills they'd started taking took effect. Perhaps things were better, Flora thought hopefully. More like they used to be. But after a month or two, the

But after a month or two, the Full-wall began to pall. The same faces, the same pratfalls, the same happy quiz masters, the puzzled prize-winners, the delinquent youths and fumbling dads, the bosoms—all the same.

On the sixty-third day, Flora switched the Full-wall off. The light and sound died, leaving a faint, dwindling glow. She eyed the glassy wall uneasily, as one might view the coffin of an acquaintance.

It was quiet in the apartment. Flora fussed with the dial-a-ration, averting her eyes from the dead screen. She turned to deploy the solitaire table and started violently. The screen, the 
residual glow having faded now, 
was a perfect mirror. She went

close to it, touched the hard surface with a finger. It was almost invisible. She studied her reflected face; the large dark eyes with shadows under them, the cheekline, a trifle too hollow now to be really chic, the hair drawn back in an uninspired bun. Behind her, the doubled room, unadorned now that all the furnishings were retracted into the floor except for the pictures on the wall: photographs of the children away at school, a sunny scene of green pastureland, a painting of rolling waves at sea, She stepped back, considering the effect.

THE floor and walls seemed to continue without interruption, except for a hardly noticeable line. It was as though the apartment were twice as large. If only it weren't so empty . . .

Flora deployed the table and chairs, dialled a lunch, and sat, eating, watching her double. No wonder Harry seemed indifferent lately, she thought, noting the rounded shoulders, the insignificant bust, the slack posture. She would have to do something in the way of self-improvement.

Half an hour of the silent companionship of her image was enough. Flora snapped the screen back on, watched almost with relief as a grinning cowboy in velvet chaps made strumming motions while an intricatelyfingered guitar melody blared from the sound track.

Thereafter, she turned the screen off every day, at first only for an hour, later for longer and longer periods. Once, she found herself chatting gaily to her reflection, and hastily fell silent. It wasn't as though she were becoming neurotic, she assured herself; it was just the feeling of roominess that made her like the mirror screen. And she was always careful to have it on when Harry arrived home. It was about aim more than the way that the same than the state of the same than the s

that Harry emerged one day from the lift smiling in a way that reminded Flora of that earlier evening. He dropped his brief-case into his floor locker, looked around the apartment, humming to himself. "What is it, Harry?" Flora

the Full-wall had been installed

asked.

Harry glanced at her. "It's not a log cabin in the woods," he said. "But maybe you'll like it anyway . . ."

"What . . . is it, dear . . ."
"Don't sound so dubious." He
broke into a broad smile. "I'm
getting you another Full-wall."
Flora looked puzzled. "But

this one is working perfectly,
Harry."

"Of course it is," he snapped.

"I mean you're getting another wall; you'll have two. What

about that? Two Full-wallsand nobody else in the cell-block has one yet. The only question is-" he rubbed his hands together, striding up and down the room, eveing the walls-"which wall is it to be? You can have it adjacent, or opposite. I went over the whole thing with the Full-wall people today. By God, they're doing a magnificent job of programming. You see, the two walls will be synchronized. You're getting the same show on both-you're seeing it from two angles, just as though you were right there in the middle of it. Their whole program has been built on that princi-

"Harry, I'm not sure I want another wall—"
"Oh. nonsense, What is this,

some kind of self-denial urge? Why not have the best—if you can afford it. And by God, I can afford it. I'm hitting my stride—"

HARRY, could I go with you some day—tomorrow? I'd like to see where you work, meet your friends—"

"Flora, are you out of your mind? You've seen the commuter car; you know how crowded it is. And what would you do when you got there? Just stand around all day, blocking the aisle? Why don't you appreciate the luxury of having your own

place, a little privacy, and now two Full-walls—"

"Then could I go somewhere else I could take a later car. I want to get out in the open air, Harry. I... haven't seen the sky for ... years, it seems."

"But . . ." Harry groped for words, staring at Flora. "Why would you want to go up on the roof?"

"Not the roof; I want to get out of the city—just for a little while. I'll be back home in time to dial your dinner . . ."

"Do you mean to tell me you want to spend all that money to wedge yourself in a verticar and then transfer to a cross-town and travel maybe seventy miles, packed in like a sardine, standing up all the way, just so you can get out and stand in a wasteland and look back at the walls? And then get back in another car—If you're lucky—and come back again?"

"No-I don't know-I just want to get out, Harry. The roof. Could I go to the roof?"

Harry came over to par Flora awkwardly on the arm. "Now, take it easy, Flora. You're a little tired and stale! I know. I get the same way sometimes. But don't get the idea that you're missing anything by not having to get into that rat-race. Heaven knows I wish I could stay home. And this new walll is going to make things different. You'll see ..."

THE new Full-wall was installed adjacent to the first, with a joint so beautifully fitted that only the finest line marked the junction. As soon as she was alone with it, Flora switched it off. Now two reflections stared back at her from behind what appeared to be two intersecting planes of clear glass. She waved an arm. The two slave figures aped her. She walked toward the mirrored corner. They advanced. She stepped back; they retreated.

She went to the far corner of the room and studied the effect. It wasn't as nice as before. Instead of a simple room, neatly bounded on all four sides by solid walls, she seemed now to occupy a stage set off by windows through which other, similar, stages were visible, endlessly repeated. The old feeling of intimate companionship with her reflected self was gone; the two mirror-women were strangers, silently watching her, Defiantly, she stuck out her tongue. The two reflections grimaced menacingly. With a small cry, Flora ran to the switch, turned the screens on.

They were seldom off after that. Sometimes, when the hammering of hooves became too wearing, or the shouting of comies too strident, she would blank them out, and sit, back to the mirror walls, sipping a cup of hot coflet, and waiting—but they were always on when Harry arrived, sometimes glum, sometimes brisk and satisfied. He would settle himself in his chair, waiting patiently enough for dinner, watching the screens.

"They're all right," he would declare, nodding. "Look at that, Flora. Look at the way that fellow whipped right across there. By golly, you've got to hand it to the Full-wall people."

"Harry—where do they make the shows? The ones that show the beautiful scenery, and trees and rolling hills, and mountains?"

Harry was chewing. "Don't 'mow," he said. "On location, I suppose."

"Then there really are places like that? I mean, they aren't just making it up?"

HARRY stared at her, mouth full and half open. He grunted and resumed chewing. He swallowed. "I suppose that's another of your cracks."

"I don't understand, Harry," Flora said. He took another bite, glanced sideways at her puzzled expression.

"Of course they aren't making it up. How the devil could they make up a mountain?"

"I'd like to see those places."
"Here we go again," Harry
said. "I was hoping I could enjoy
a nice meal and then view

awhile, but I guess you're not going to allow that."

"Of course, Harry. I just said—"

"I know what you said. Well, look at them then." He waved his hand at the screen. "There it is; the whole world. You can sit

right here and view it all—

"But I want to do more than just view it. I want to live it. I want to be in those places, and feel leaves under my feet, and have rain fall on my face—"

Harry frowned incredulously. "You mean you want to be an actress?"

"No, of course not-"

"I don't know what you want.
You have a home, two Full-walls,
and this isn't all. I'm working toward something, Flora . . ."

Flora sighed. "Yes, Harry.
I'm very lucky."

"Darn right." Harry nodded emphatically, eyes on the screens. "Dial me another coflet, will you?"

THE third Full-wall came as a fusurprise. Flora had taken the 1100 car to the roboclinic on the 478th level for her annual check up. When she returned home—there it was. She hardly noticed the chorus of gasps cut off abruptly as the door shut in the faces of the other wives in the

car. Flora stood, impressed in

spite of herself by the fantastic

panorama filling her apartment.

Directly before her, the studio audience gaped up from the massed seats. A fat man in the front row reached inside a red plaid shirt to scratch, Flora could see the perspiration on his forehead. Farther back, a couple nuzzled, eves on the stage, Who were they. Flora wondered: How did they manage to get out of their apartments and offices and sit in a real theatre . . .

To the left, an owlish youth blinked from a brightly lit cage. And on the right, the MC caressed the mike, chattering,

Flora deployed her chair, sank down, looking first this way, then that. There was so much going on-and she was in the middle of it. She watched for half an hour, then retracted the chair, deployed the bed. She was tired from the trip. A little nap . . .

She stopped with the first zipper. The MC was staring directly at her, leering. The owlish youth blinked at her. The fat man scratched himself, staring up at her from the front row. She couldn't undress in front of all of them . . . She glanced around, located

the switch near the door. With the click, the scene died around her. The glowing walls seemed to press close, fading slowly. Flora turned to the one remaining opaque wall, undressed slowly, her eyes on the familiar pictures. The children-she hadn't seen them since the last semiannual vacation week. The cost of travel was so high, and the crowding . . .

She turned to the bed-and the three mirror-bright walls confronted her. She stared at the pale figure before her, stark against the wall patched with its faded mementos. She took a step; on either side, an endless rank of gaunt nude figures stepped in unison. She whirled. fixed her eyes gratefully on the familiar wall, the thin crevice outlining the door, the picture of the sea. . . .

She closed her eyes, groped her way to the bed. Once covered by the sheet, she opened her eyes. The beds stood in a row, all identical, each with its huddled figure, like an infinite charity ward, she thought-or like a morgue where all the world lay dead . . .

TTARRY munched his yeast Chop, his head moving from side to side as he followed the action across the three walls. "It's marvellous, Flora, Mar-

vellous. But it can be better vet." he added mysteriously.

"Harry-couldn't we move to a bigger place-and maybe do away with two of the walls. I-"

"Flora, you know better than that. I'm lucky to have gotten this apartment when I did; there's nothing-absolutely nothing available." He chuckled. "In a way, the situation is good job insurance. You know, I couldn't be fired, even if the company wanted to: They couldn't get a replacement. A man can't very well take a job if he hasn't a place to live in the city -and I can sit on this place as long as I like; we might get tired of issue rations, but by God we could hold on: so-not that anybody's in danger of getting fired." "We could move out of the

city, Harry. When I was a girl

"Oh, not again!" Harry groaned, "I thought that was all threshed out, long ago." He fixed a pained look on Flora. "Try to understand, Flora, The population of the world has doubled since you were a girl. Do you realize what that means? There are more people alive now than had been born in all previous human history up to fifty years ago. That farm you remember visiting as a kid-it's all paved now, and there are tall buildings there. The highways you remember, full of private autos, all driving across open country: they're all gone. There aren't any highways, or any open country except the TV settings and a few estates like the President's acre and a half-not that any sun hits it, with all those build-

ings around it—and maybe some essential dry-land farms for stuff they can't synthesize or get from the sea."

"There has to be some place we could go. It wasn't meant that people should spend their lives like this—away from the sun, the sea..."

A shadow crossed Harry's face. "I can remember things. too, Flora," he said softly. "We spent a week at the beach once. when I was a small boy. I remember getting up at dawn with the sky all pink and purple, and going down to the water's edge. There were little creatures in the sand-little wild things. I could see tiny fish darting along in a wave crest, just before it broke. I could feel the sand with my toes. The gulls sailed around overhead, and there was even a tree-

"But it's gone now. There isn't any beach, anywhere. That's all over . . ."

He broke off. "Never mind. That was then. This is now. They've paved the beach, and built processing plants on it, and they've paved the farms and the parks and the gardens—but they've given us Full-wall to make up for it. And—

THERE was a buzz from the door. Harry got to his feet.

"They're here, Flora. Wait'll

Something seemed to tighten around Flora's throat as the men emerged from the lift, gingerly handling the great roll of wall screen.

"Harry . . ."

"Four walls," Harry said triumphantly. I told you I was working toward something, remember? Well, this is it! By God, the Harry Trimble's have shown 'cm!"

"Harry—I can't—not four walls . . ."

"I know you're a little overwhelmed—but you deserve it, Flora—"

"Harry, I don't WANT four walls! I can't stand it! It will be all around me—"

Harry stepped to her side, gripped her wrist flercely. "Shut up!" he hissed. "Do you want the workmen to think you're out of your mind?" He grinned at the men. "How about a coflet, boys?"

"You kiddin?" one inquired.
The other went silently about the
work of rolling out the panel, attaching contact strips. Another
reached for the sea-scene—

"No!" Flora threw herself against the wall, as though to cover the pictures with her body. "You can't take my pictures! Harry, don't let them."

"Look, sister, I don't want your crummy pictures."

"Flora, get hold of yourself! Here, I'll help you put the pictures in your floor locker." "Bunch of nuts," one of the men muttered.

"Here, keep a civil tongue in

your head," Harry started.

The man who had spoken

The man who had spoken stepped up to him. He was taller than Harry and solidly built. "Any more crap outa you and I'll break you in half. You and the old bag shut up and keep outa my way. I gotta job to do." Harry sat beside Flora, his

face white with fury. "You and your vaporings," he hissed. "So I have to endure this. I have a good mind to . . ." he trailed off.

The men finished and left with all four walls blaring.

"Harry," Flora's voice shook.
"How will you get out? They've
put it right across the door;
they've sealed us in . . ."

"Don't be a bigger idiot than you have to." Harry's voice was ugly over the thunder from the screens. He went to the newly covered wall, groped, found the tiny pin-switch. At a touch, if sild aside as always, revealing the blank face of the lift shaff safety door. A moment later it too sild aside and Harry forced his way into the car. Flora caught a glimpae of his flushed angry face as the door closed.

A ROUND her, the walls roared. A saloon fight was in full swing. She ducked as a

chair sailed toward her, whirled to see it smash down a man behind her. Shots rang out. Men ran this way and that. The noise was deafening. That man, Flora thought; the vicious one; he had set it too loud purposely. The scene shifted. Horses gal-

loped across the room; dust clouds rose, nearly choking her in the verisimilitude of the illusion. It was as though she crouched under a small square canopy of ceiling in the middle of the immense plain.

Now there were cattle, wildeyed, with tossing horns, bellowing, thundering in an unbroken sea across the screens, charging at Flora out of the wall, pouring past her on left and right. She screamed, shut her eyes, and ran blindly to the wall, groping for the switch.

gasped in relief, her head humming. She felt faint, dizzy; she had to lie down— Everything was going black around her; the glowing walls swirled, fading. Flora sank to the floor.

Later—perhaps a few minutes, maybe hours—she had no way of knowing—Flora sat up. She looked out across an infinite viata of tile floor, which swept away to the distant horizon in all directions as far as the eye could see; and over all that vast plain, hollow-eyed women crouched at intervals of fifteen feet, in endless numbers, waiting.

Flora stared into the eyes of the nearest reflection. It stared back, a stranger. She moved her head quickly, to try to catch a glimpse of the next woman but 'no matter how fast she moved, the nearer woman anticipated her, interposing her face between Flora and all the others. Flora turned; a cold-eyed woman guarded this rank, too. "Please." Flora heard herself

pleading. "Please, please—"
She bit her lip, eyes shut, She

She bit her lip, eyes shut. She had to get hold of herself. These were only mirrors—she knew that. Only mirrors. The other women—they were mere reflections. Even the hostile ones who hid the others—they were herself, mirrored in the walls.

She opened her eyes. She knew there were joints in the glassy wall; all she had to do was find them, and the illusion of the endless plain would collapse. There -that thin black line, like a wire stretched from floor to ceiling-that was a corner of the room. She was not lost in an infinitude of weeping women on a vast plain; she was right there. in her own apartment-alone. She turned, finding the other corners. They were all there, all visible: she knew what they were . . .

But why did they continue to

look like wires, setting apart the squares of floor, each with its silent, grieving occupant . . . ?

She closed her eyes again, fighting down the panic. She would tell Harry. As soon as he came home—it was only a few hours—she would explain it to him.

"I'm sick, Harry. You have to send me away to some place where I'll lie in a real bed, with sheets and blankets, beside an open window, looking out across the fields and forests. Someone someone kind-will bring me atray, with a bowl of soup—real soup, made from real chickens and with real bread and even a glass of milk, and a napkin, made of real cloth..."

She should find her bed, and deploy it, and rest there until Harry came, but she was so tired. It was better to wait here, just relaxing and not thinking about the Immense floor and the other women who waited with her...

She slept.

When she awoke, she sat up, confused. There had been a dream . . .

But how strange. The walls of the cell block were transparent now; she could see all the other apartments, stretching away to every side. She nodded; it was as she thought. They were all as barren and featureless as her own and Harry was wrong. They all had four Full-walls. And the other women—the other wives, shut up like her in these small, mean cells; they were all aging, and sick, and faded, starved for fresh air and sunshine. She nod-ded again, and the woman in the next apartment nodded in sympathy. All the women were nodding; they all agreed—poor things.

When Harry came, she would show him how it was. He would see that the Full-walls weren't enough. They all had them, and they were all unhappy. When Harry came—

It was time now. She knew it. After so many years, you didn't need a watch to tell when Harry was due. She had better get up, make herself presentable. She rose unsteadily to her feet. The other husbands were coming. too, Flora noted; all the wives were getting ready. They moved about, opening their floor lockers, patting at their hair, slipping into another dress. Flora went to the dial-a-ration and all around, in all the apartments, the wives deployed the tables and dialled the dinners. She tried to see what the woman next door was dialling, but it was too far, She laughed at the way her neighbor craned to see what SHE was preparing. The other woman laughed, too, She was a good sport.

"Kelpies." Flora called cheerily. "And mockspam, and cof-

Dinner was ready now. Flora turned to the door-wall and waited. Harry would be so pleased at not having to wait. Then, after dinner she'd explain about her illness-

Was it the right wall she was waiting before? The line around the door was so fine you couldn't really see it. She laughed at how funny it would be if Harry came in and found her standing, staring at the wrong wall.

She turned, and saw a movement on her left-in the next apartment. Flora watched as the door opened. A man stepped in. The next-door woman went forward to meet him-

To meet Harry! It was Harry! Flora whirled. Her four walls stood blank and glassy, while all around her, the other wives greeted Harry, seated him at their tables, and offered him coffet . . .

"Harry!" she screamed, throwing herself at the wall. It threw her back. She ran to the next wall, hammering, screaming. Harry! Harry!

In all the other apartments. Harry chewed, nodded, smiled, The other wives poured, fussed over Harry, nibbled daintily, And none of them-not one of them-paid the slightest attention to her . . .

She stood in the center of the room, not screaming now, only sobbing silently. In the four glass walls that enclosed her, she stood alone. There was no point in calling any longer.

No matter how she screamed, how she beat against the walls. or how she called for Harryshe knew that no one would ever hear. THE END

### ARE YOU AWARE

That the classified pages of AMAZING afford readers and advertisers alike an opportunity to buy, sell and trade in the world's oldest science-fiction market place.

And it costs so little. Only 25¢ a word.

Get in touch with science-fiction fans throughout the world now try AMAZING's classified columns. You'll be glad that you did.

> Martin Lincoln, Classified Advertising Manager AMAZING

One Park Avenue

New York 16, New York

FANTASTIC SUBSCRIPTION OFFER—YOU SAVE \$1.21

## FANTASTIC STORIES OF IMAGINATION

5 99 months for only

### (You get the equivalent of 3 issues FREE!)

Sparkling fiction of the imagination the supermatural—of worlds where space and time extend beyond reality. Famous fantasy—s-f authors take you to far-off reaches of future history, to the hidden recesses of men's minds, to experiences with strange people and creatures you will not soon forget! A new dimension in eeric adventure! FANTASTIC would cost you \$4.20. But with this offer, you get the same full year for only \$2.99—a saving of \$1.21 — the equivalent of receiving your first three Issues FREEI The finest magazine in the field...the added convenience of home delivery...plus a big saving bon't miss out-mail your order now

FANTASTIC • 434 So. Wabash Ave., Chicago 5, III.

	Send	me	the	next	12	issues	and	bill	me	glandanio, ala,
	Send me the next 12 issues and bill me later for only \$2.99.							3 EXTRAS		

My payment of \$2.99 is enclosed.

Name\_\_\_\_\_

Address\_\_\_\_\_

7000

Please print 7310

one State Payment er

☐ Bill me later.
☐ Payment enclosed.

EXTRA SAVING!

City Zone State State Characteristics of Canada and Pan Amer. Union countries; add \$1 extra for all other foreign.)

## Intelligent LIFE in SPACE

By BEN BOVA

Illustrated by FINLAY

If man is the only intelligent race man himself knows... and if we are not absolutely sure that intelligence is in the first place... how will we know

it if we come across it elsewhere in the universe?

THIS article will be devoted to a few speculations about the prospects for intelligent life elsewhere in the universe. "Speculations" is, unfortunately, the most appropriate word to use when discussing extraterestrial intelligence. For all our opinions about intelligence are bound to be limited by the fact that Earth has only one full intelligent species—and there has even been some doubt expressed about its intelligence.

#### What is Intelligence?

Intelligence is much easier to talk about than to define. Webster calls intelligence "the power or act of understanding...the power of meeting any situation, esp. a novel situation, success-

fully by proper behavior adjustments; also, the ability to apprehend the interrelationships of presented facts in such a way as to guide action toward a desired goal . . ."

Obviously, the dictionary does not define "intelligence" in the same way it defines more palpa-"height." terms like "weight," or even "brain," And note that the definition of "intelligence" is a subjective and external one. That is, to apply the definition, an outside observer must watch the antics of the creature in question and see if his behavior entitles him to be termed "intelligent." Evidently there is no absolutely accurate way of measuring intelligence in the same manner that a physician can measure blood pressure or basal metabolic rate. Even an I.Q. test yields only a guide, an approximation.

Note also that the dictionary definition poses three tests for deciding if a creature is intelligent. The creature must "understand," make "behavior adjustments," and be able to "apprehend . . . interrelationships." Understand, adjust, interrelate: certainly without these abilities a creature cannot be termed intelligent. Yet-every animal has the ability to recognize certain sets of sensory impressions, to interrelate them and adjust its behavior accordingly. The difference between intelligent man and unintelligent amoeba is in the degree of understanding, adjustment and interrelating.

More particularly, it has been said that the real test of intelligence is the ability to handle abstract thought. Animals live in the present, responding to immediate sense impressions. The past is meaningless and the future dimly perceived, if at all. Men live in a continuum of past, present and future. Man is evidently the only creature on Earth that can consciously conceive of a time that is not-yet. A male gibbon can make a sound that means "Keep away from my wife!" Imperative, immediate. A male human being can say, "If you don't keep away from my

wife, I will shoot you." A choice of conscious actions which will take place in the future.

Intelligence, then, is a relative matter—something that may be judged qualitatively, but defies quantitative measurement.

All of which brings us to a rule-of-thumb test for intelligence: If a race of creatures has the ability to communicate, so that one individual of the species can share a pool of knowledge accumulated by the race as a whole, then we may say that the race is fully intelligent. This test carries within it the implications of abstract thought and communication, the ability to understand, adjust, and interrelate. Moreover, it implies that a truly intelligent race will be constantly adding to its pool of accumulated knowledge, as new individuals create and communicate new ideas. An intelligent race, in other words, will constantly change its environment -sometimes very slowly, sometimes explosively fast. This is what is usually meant when people speak of man's "progress."

### Intelligent Species of Earth

Is man truly the only intelligent species on this planet? The social insects have accomplished remarkable achievements, and have survived many hundreds of times longer than man's onemillion-year tenure on Earth.



Some of the large sea-going rammals, such as the dolphins and killer whales, have large complex brains and the ability to make linguistic sounds. And there are other primates, particularly the chimpanzee, which show more intellect at birth than do human babies.

The social insects-particularly the ants-are a fascinating example of how complicated this problem of intelligence can be. A single ant is demonstrably dull. It can learn its way through a maze, but quickly forgets. It has not even the lowly intelligence of a mouse Vet colonies of ants behave in a highly-organized fashion. There is division of labor, engineering and architecture. "nursing" of young, exploration, some degree of communication. The concept of group intelligence has often been raised in connection with the ants and other social insects.

Is an ant colony an intelligent, sentient creature composed of many unintelligent individuals? This is a bit hard for most human beings to accept, and yet an unblased observer might point out that the human being is an intelligent, sentient creature composed of many unintelligent individual cells. A single brain cell is certainly not intelligent, yet it belongs to a system that is. Let us apply our rule-ofthumb test to the ants. after thumb test to the ants. after

making a slight mental adjustment that allows us to consider both an individual and a colony as a single creature. Have the ants been able to communicate and establish a pool of knowledge that can be shared by succeeding generations of colonies (and/or individuals)? The best answer that scientists can give today is: No. Apparently, everything the ants do, they do by instinct. They do not learn to speak, they are born with an instinctive communicative ability, and no ant can rise beyond the limitations of its instincts. Ants can perform prodigies of labor, but everything they do can be explained in terms of physical adaptions. The final test of the ants' in-

telligence is to compare their progress over the past million years with man's. A million years ago, man-like primates were shambling through African forests. A hundred thousand years ago, human hunters were slaughtering every edible land animal on this planet. Ten thousand years ago, men invented agriculture and began to build cities. Today, humanity holds the power of the atom and has already begun to explore interplanetary space. And in all that time, the ants have changed their ways not at all. Much the same argument can

be applied to the dolphins. Re-

cently there has been great interest in the relative intelligence of dolphins, and a Nobel Prizewinning scientist, Leo Szilard, has even written a science-fiction story that hinges on the credibility of intelligent, speaking dolphins. The main interest in this case is the large brain of the dolphin; it is larger than the human brain (about 1600-1700 grams compared to an average of 1400 for man), and structurally just as complex. Dolphins have been trained to imitate human voices. They evidently communicate among themselves in a primitive fashion. They are surprisingly bright, agile, and beautifully adapted to sea-faring, There are many, many stories, dating back to antiquity, of dolphins helping to save floundering human swimmers by buoying them up on their backs and carrying them to shore.

A DMITTEDLY, the scientific study of dolphins is just beginning. But to date, there is no really impressive evidence for an intelligence comparable to man's. Despite their large and complex brains, the dolphins have shown an intelligence little better than a dog's, and not as high as a chimpanusee's. Their vocal abilities are on a par with a traities are on a few maning from their use of a vocal "sonar" in underwater navigation. Howev-

er, man is at a distinct handicap in assessing dolphin intelligence, simply because we cannot watch the dolphins in their natural environment. It is only in the past ten years or so that we have built swimming tanks large enough to allow aquatic mammals to be studied.

In the open ocean, the dolphins are free-roaming hunters. They are playful and plentiful-two indications of at least some intelligence. Their cousins, the vicious, slightly larger killer whales, actually hunt in packs and show much ingenuity in attacking practically every type of sea-going mammal, including the gigantic blue whale. But, again, the killer whales have not shown a higher degree of intelligence than a pack of terrestrial wolves. If the dolphins or killer whales are as intelligent as man. their environment is so different from ours that we have, at present, no adequate method of gauging their talents. This is an important fact to keep in mind when considering the intelligence of creatures from alien planets.

Of all the potentially-intelligent animals of Earth, the chimpanzee is the closest to man, the most easily studied, and easily the brightest. In fact, for the first year or so after birth chimps actually learn more quickly than human babies. A

one-year-old chimp can do a variety of tricks and even rasp out a few human words, if properly trained. The chimpanzee matures much more quickly than a human baby, both physically and mentally. But there is a cross-over point. Sometime during the second year, the human baby begins to learn how to speak. He starts to tap that reservoir of accumulated racial knowledge. The chimp, meanwhile, seems to get tired of doing tricks-the whole business of performing and saving words apparently becomes pointless to him. His "intellectual" development ends. In short, the human baby goes on to become human; the chimpanzee, despite a heroic effort, cannot be anything other than an ape.

The major reason for this is, of course, the relative sizes of the human and chimpanzee brain; man's brain is some 3.5 times larger (1400 grams compared to about 400).

But there are other reasons also. In fact, many physical anthropologists now believe that man's brain was the last part of him to become human. To bear this out they have unearthed evidence that points to the conclusion that man developed physically into human form before he developed mentally into Home sanjens, thinking man.

THE anthropologist Carleton I S. Coon pointed out that man has five distinct features-five gifts-that distinguish from the other primates: First, man stands erect and walks on two feet. This leaves him prone to backaches, due to the forced curvature of his primate spine. Man's foot has fused into an arched load-carrier capable of supporting his body weight with no help whatsoever from the arms. The arch occasionally collapses and leaves man flat-footed. But even so, man's overworked feet and aching back allow his hands complete freedom from the chore of locomotion. Man's remarkable hands are his second gift, and perhaps his

most important. Once man be-

comes an erect biped, his hands

are free to get into mischief-

and also to pick fruit, to fold in

prayer, to fashion a tool. Archeo-

logical evidence has shown that

very primitive proto-men, crea-

tures that were still mostly ape and had quite small brains, actu-

ally used tools. Anthropologists

are now largely agreed that tools made man, not vice versa, With-

out his grasping hands, man

could never have become a tool-

maker. Human hands are more

flexible, grasp better, and are ca-

pable of much more delicate ma-

nipulations than any of the primate apes' (or, indeed, the grasping organs of any animal on Earth).

The ability to use his hands to grasp objects no doubt had much to do with man's third giftfine-focusing, stereoscopic, color vision. All the primates have good eyes, but man's seem to be the best of the lot. Part of man's visual acuity is probably due to the need to inspect very closely objects that his hands have picked up. A million years ago, man's ancestors picked fruits and examined them carefully. Today, man uses the eyes he has developed to examine stars and atoms-and astronomers still insist that no camera made can equal the human eye's ability to distinguish fine detail.

The first three of man's five gifts were physical. The other two are mental. With feet capable of fleet running, hands free to selze the environment, the eyes sharp enough to spot a meal on the hoof from a distance of miles, man began to develop his ability to think. The anthropolegical evidence shows that man's brain began to increase in size only after the rest of body became human. But once man's brain did increase to its present size, it became his fourth gift.

Why and how man developed his brain is still a mystery. The plain truth is that man's brain and his intelligence—is at least a full order of magnitude greater than that of his nearest rivals, the chimps. The dolphins, as we have seen, have larger brains. But, lacking hands, lacking the challenges and stimul of a terrestrial environment, they have never developed their brains to the pitch that man has. The ants, clever and highly-regimented though they are, simply lack the brain size to break free of their instincts.

The fifth and final gift stems directly from man's brain, and puts the final touch on his development of intelligence: it is his ability to speak. Not merely to make noises, as birds and monkeys and dolphins do. Not merely to communicate to few limited present-tense imperatives, as the ants and bees and some primate apes do. Man can speak. He can tell about the past. he can speculate about the future, he can unload his fears into the ear of a psychiatrist or a priest, he can recite poetry, he can argue physics, and metaphysics, he can add to-and draw from-an accumulation of knowledge that goes back to before the taming of fire.

The impact of this ability to speak must have been infinitely more meaningful to man's development than its paler counterpart of historic times—the invention of printing. The ability to speak far beyond the range of the unaided voice, through books, ushered in the scientific age. Without printing, we would still be in medieval darkness. Without speech itself, we would be a little better than the chimpanzees.

Thus, while we cannot fully define man's intelligence, we can describe its attributes and its sources. Now we are ready to look out into space and see if these qualities can be found elsewhere.

### Intelligence in the Solar System

In earlier articles, we considered the prospects for active life through the solar system. We concluded that life was highly improbable on the Moon of Mercury, possible high in the atmosphere of Yenus (but unlikely on its 600°P surface), possible again in the ammoniated oceans of Jupiter and the other giant planets, and almost certainly present on Mars.

Venus: We speculated on the possibility of life evolving high in the Venusian atmosphere, above the killing heat of the surface, and perhaps at the upper levels of the planet-wide cold deck. Such Venusian life forms would have to be completely airborne. They would be forced to spend their lives at an altitude where the temperature level is neither too hot nor too cold for water-based biochemical reac-

tions. There are many life forms on Earth that spend long times aloft-airborne spores and bacteria, even certain insects and spiders have been known to waft across intercontinental distances, at altitudes up to 16,000 feet. Speculations about a completely airborne Venusian flora and fauna are not totally out of the question, therefore, even though it is difficult to see how such forms could have originally evolved from nonliving material on the planet. (However, the recent discoveries of microscopic life forms aboard meteorites raises the question of interplanetary "seeding.")

Assuming that Venus' upper atmosphere does bear living forms, what is the probability that these forms could develop a high degree of intelligence? Remote, it would seem. Tiny, aerial insect-and spider-like animals would most likely be the high points of Venusian life. It would be very difficult to envision heavier-than-air animals, such as birds, capable of remaining aloft perpetually. Their energy-expenditure would be staggering. If we agree that insect-types are the highest animal forms on Venus, the prospects for intelligence are dim indeed.

Jupiter: In our earlier articles, we saw that the physical conditions on Jupiter and the

other giant planets are completely alien: heavy gravity, unbearable pressures, poisonous hydrogen-ammonia-methane atmosphere, corrosive ammoniated seas, abysmal cold. While these conditions rule out any recognizable form of life, we were still able to postulate an ammoniabased creature, living in the planet-wide ocean, thick-shelled and propelled by a jet system similar to the water siphons used by earthly cuttlefish. We also concluded that the Jovian cuttlefish would not be highly intelligent. We equated his IQ with that of the dolphins, at best; his needs would be to recognize food, friend, and foe-a higher order of intelligence would be unlikely.

The Jovian, as pictured, has no real equivalent to man's fine grasping hand. A mandible or claw is no substitute, as earthly parallels can show. Moreover, living in the sea, the Jovian would have very little to grasp at, except food. This brings up another point: If the physical conditions of Jupiter are as we now picture them, the planet must be relatively poor in metals and elements heavier than oxygen. How far would man's intelligence have carried him without copper. tin, iron, or flint? What simple energy-yielding reaction would the Jovians be able to harness that parallels man's harnessing of fire?

Living in a murky sea under a cloudy atmosphere on a planet that is more than five times farther from the Sun than we are. it is very likely that the Jovian is blind. There would be little light. if any, to see by. Perhaps infrared sensors would be in order. but if the experience of earthly deep-sea dwellers counts for anything, the Jovians are more apt to depend on sonar-type echo locating systems, or sensitive feelers that respond to liquid wave motions, than on light receptors. Finally, it must take an enor-

mous amount of effort merely to move through the swirling. dense seas of a high-gravity planet. The Jovian might well be caught in a vicious circle in which he must constantly feed. so that he can maintain the energy to move about, so that he can find food, so that, . . . In any event, if we do find creatures in Jupiter's ammonia seas, we had better be very careful about deciding on their intelligence. Our experiences with Earthly dolphins has shown that we are nowhere near attaching a definite answer to the question: What is intelligence?

Mars: There are two important considerations to bear in mind about Mars—(1) it is practically certain that the annual color changes seen on the Red and Green Planet are due to veg-

etation: (2) the canals have been photographed. Concerning the second point, there is still no agreement among astronomers that the photographs show actual artificially-constructed canals; many observers insist that the camera is merely linking up a string of images that exist in a more-or-less straight line. This argument is akin to the old claim that the canals were optical illusions: now it is the camera, presumably, that is seeing things that are not really there. Within the next few years, though, orbiting telescopes will photograph Mars from above Earth's turbulent atmosphere. If the canals show up more sharply then, the "optical illusion" argument should be permanently shattered. Let us grant, then, the as-

sumption that the canals actually exist. Are they artifacts built by intelligent creatures, or are they natural features of the Martian landscape? Firstly, they do not resemble terrestrial rivers, or even dry river beds. Secondly, they apparently support vegetation, for what we see through our telescopes are bands of color (vegetation) that become dark during the Martian spring and fade with autumn. The canals themselves, if they exist, would be far too small to detect in any Earth-bound telescope.

Now, this vegetation itself might provide a clue for our question of intelligent life on Mars. Up until quite recently, it was supposed that any vegetation that might exist on Mars would have to be quite primitive and simple, akin to earthly mosses and lichens. Only very hardy, simple planets could survive the dry, cold environment of Mars, it was claimed. But Frank B. Salisbury, professor of plant physiology at Colorado State University, and others, have taken exception to this viewpoint. The Martian climate is so extreme, they argue, that a simple lichen could not survive. Martian plants must be not only hardy. but very well adapted to sub-zero nights, practically waterless conditions, and considerably more ultraviolet radiation from the Sun than we receive on Earth. In short, any plant life on Mars would have to be highly specialized, highly organized. Worlds Enough and Time

THE prospects for intelligent life in the solar system, then, appear disappointingly small (or, reassuringly small, depending on your viewpoint). Mars is the most likely spot, and the evidence for intelligence even there is mostly negative. Life that might exist on Venus or Jupiter and the other giant planets is most probably unintelligent. The

Moon, Mercury, Pluto, the microbe-bearing meteoroids-all seem devoid of intelligence. But this is not a surprising conclusion. Remember that until

rather recently, the concept of

life itself in space could be dis-

missed with a flat negative.

Then, as biochemists learned more about the life processes of earthly creatures, and astronomers learned more about the conditions on the planets, attitudes changed, Now, most astronomers are convinced that life exists on Mars. Scientists are waging an intellectual battle at this moment over the possibilities of extraterrestrial life forms in carbonaceous meteorites. The more we learn, the more likely it becomes that life is far too versatile and tenacious to be confined to one planet. Now, if our exercise of the past few pages has shown anything, it has demonstrated that we know very little about intelligence. We are handicapped by having only one intelligent race to work with, and that race is not overly enthusiastic about experimentation on itself. It seems likely that, as we learn more about man's intelligence and about the relative intelligence of

other animals, we will be in a better position to determine what are the requirements for intelligent life elsewhere in the solar system. And, of course, the time

is not too far off when we can search other worlds for native life, intelligent and not,

Nor is the solar system the only likely abode of intelligent life. As we saw in Life Among the Stars (AMAZING, November 1962), it is very probable that a majority of stars have planetary systems similar to our own. Given similar conditions, and enough time, we can expect the evolution of intelligent life to be no more remarkable or unlikely than it was here on Earth. One final question: What hap-

pens at that inevitable moment when man discovers an alien. intelligent race? Will we run, or talk, or fight? Although man is quite alone in his intelligence here on Earth, this was not always the case. About 150 thousand years ago. Homo sapiens was engaged in a very real competition for survival against another race, fully as intelligent as he: Homo neanderthalensis. The hattle between our ancestors and Neanderthal man must have been long and bitter. Our best evidence of this is the outcome: Neanderthal man is extinct. Homo sapiens won his first struggle against a rival intelligent species.

Will our second meeting with an intelligent race also result in extinction?

If so, which race will be extinguished? THE END Glibly we talk of racial memory, the womb of the ocean mother, the trace of salt in our blood stream.

How terrifying they become in the light of . . .

## the SHERRINGTON THEORY

By J. G. BALLARD

Illustrated by BLAIR

THEY remind me of the Gadarene swine," Mildred Pelham remarked.

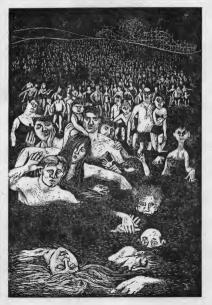
Interrupting his scrutiny of the crowded beach below the cafeteria terrace, Roger Pelham glanced at his wife. "Why do you say that?"

Mildred continued to read for a few moments, and then lowered her book. "Well, don't they?" she asked rhetorically. "They look like pigs."

Tepham smiled weakly at this mild but characteristic display of misanthropy. He peered down at his own white knees protruding from his shorts and at his wife's oiled arms and shoulders. "I suppose we all do," he temporized. However, there was little chance of Mildred's remark being overheard and resented. They were sitting at a corner table, with

their backs to the hundreds of ice-cream eaters and cola-drinkers crammed elbow to elbow on the terrace. The dull hubbub of voices was overlayed by the endless commentaries broadcast over the transistor radios propped among the bottles, and by the distant sounds of the fairground helpind the dunes

A short drop below the terrace was the beach, covered by a solid mass of reclining figures which stretched from the water's edge up to the roadway behind the cafeteria and then away over the dunes. Not a single grain of sand was visible. Even at the tide-line, where a little slack water swilled weakly at a debris of old cigarette packets and other trash, a huddle of small children clumb, to the skirt of the beach, hiding the grey sand.



GAZING down at the beach again, Pelham realized that his wife's ungenerous judgment was no more than the truth. Everywhere bare haunches and shoulders jutted into the air. limbs lay in serpentine coils. Despite the sunlight and the considerable period of time they had spent on the beach, many of the people were still white-skinned. or at most a boiled pink, restlessly shifting in their little holes in a hopeless attempt to be com-

fortable. Usually this spectacle of jostling, over-exposed flesh, with its unsavory bouquet of stale suntan lotion and sweat-looking along the beach as it swept out to the distant cape. Pelham could almost see the festering corona. sustained in the air by the babble of ten thousand transistor radios, reverberating like a swarm of flies-would have sent him hurtling along the first inland highway at seventy miles an hour. But for some reason Pelham's usual private distaste for the general public had evaporated. He felt strangely exhilarated by the presence of so many people (he had calculated that he could see over 50 thousand along the five-mile stretch of beach) and found himself unable to leave the terrace, although it was now 3 o'clock and neither he nor Mildred had eaten since breakfast Once their corner seats were surrendered they would never regain them

To himself he mused: 'The icecream eaters on Echo beach. . . .' He played with the empty glass in front of him. Shreds of synthetic orange pulp clung to the sides, and a fly buzzed half-heartedly from one to another. The sea was flat and calm, an opaque grev disc, but a mile away a low surface mist lay over the water like vapor on a vat. "You look hot, Roger, Why

don't you go in for a swim?" "I may. You know, it's a curi-

ous thing, but of all the people here, not one is swimming."

MILDRED nodded in a bored way. A large passive woman, she seemed content merely to sit in the sunlight and read. Yet it was she who had first suggested that they drive out to the coast, and for once had suppressed her usual grumbles when they ran into the first heavy traffic jams and were forced to abandon the car and complete the remaining two miles on foot, Pelham had not seen her walk like that for ten years, impelled towards the sea like a lemming.

"It is rather strange," she said. "But it's not particularly

warm.

"I don't agree." Pelham was about to continue when he suddenly stood up and looked over the rail at the beach, Half-way down the slope, parallel with the promenade, a continuous stream of people moved slowly along an informal right-of-way, shouldering past each other with fresh bottles of cola, lotion and icecream.
"Roger, what's the matter?"

"Nothing.... I thought I saw Sherrington." Pelham searched the beach, the moment

of recognition lost

"You're always seeing Sherrington. That's the fourth time alone this afternoon. Do stop worrying."

"I'm not worrying. I can't be certain, but I felt I saw him then."

Reluctantly, Pelham sat down, edging his chair fractionally closer to the rail. Despite his mood of lethargy and vacuous boredom, an undefinable but distinct feeling of restlessness had preoccupied him all day. In some way associated with Sherrington's presence on the beach, this uneasiness had been increasing steadily. The chances of Sherrington-with whom he shared an office in the Physiology Department at the University-actually choosing this section of the beach were remote, and Pelham was not even sure why he was so convinced that Sherrington was there at all. Perhaps these illusory glimpses-all the more unlikely in view of Sherrington's black beard and high

severe face, his stooped longlegged walk—were simply projections of this underlying tension and his own peculiar dependence upon Sherrington.

However, this sense of unto himself. Although Mildred seemed immune, most of the people on the beach appeared to share this mood with Pelham. As the day progressed the continuous hubbub gave way to more sporadic chatter. Occasionally the noise would fall away altogether, and the great concourse, like an immense crowd waiting for the long-delayed start of some public spectacle, would sit up and stir impatiently. It was a group reaction, consistent and predictable, as if all were motivated by the same stimulus. To Pelham, watching carefully from his vantage point over the beach, these ripples of restless activity, as everyone swayed forward in long undulations, were plainly indicated by the metallic glimmer of the thousands of portable radios moving in an oscillating wave. Pelham also couldn't help but note that each successive spasm, recurring at roughly half-hour intervals. seemed to take the crowd slightly nearer the sea.

Directly below the concrete edge of the terrace, among the mass of reclining figures, a large family group had formed a private enclosure. To one side of this, literally within reach of Pelham. the adolescent members of the family had dug their own nest, their sprawling angular bodies, in their damp abbreviated swimming suits, entwined in and out on each other like some curious annular animal. Well within earshot, despite the continuous back ground of noise from the beach and the distant fair-grounds, Pelham listened to their inane talk, following the thread of the radio commentaries as they switched aimlessly from one station to the next.

"They're about to launch another satellite," he told Mildred.
"Echo XXII."
"Why do they bother?" Mil-

dred's flat blue eyes surveyed the distant haze over the water. "I should have thought there were more than enough of them flying about already."

"Well ..." For a moment Pelham debated whether to pursue the meager conversational possibilities of his wife's reply. Although she was married to a lecturer in the School of Physical cology, her interest in scientific matters was limited to little more than a blanket condemnation of the entire sphere of activity. His own post at the University she regarded with painful tolerance, despising the untidy office, scruffy students and meaningless laboratory equipment. Pelham had nev-

er been able to discover exactly what calling she would have respected. Before their marriage she maintained what he later realized was a polite silence on the subject of his work; after element of the subject of his work; after element of the subject of his most igencies of living on his meagre salary had forced her to take an interest in the subtle, complex and infinitely wearying game of promotional snakes and ladders.

A S expected, her acerbic tongue A had made them few friends, but by a curious paradox Pelham felt that he had benefitted from the grudging respect this had brought her. Sometimes her waspish comments, delivered at the overlong sherry parties, always in a loud voice during some conversational silence (for example, she had described the elderly occupant of the Physiology chair as 'that gerontological freak' within some five feet of the Professor's wife) delighted Pelham by their mordant accuracy. but in general there was something frightening about her pitiless lack of sympathy for the rest of the human race. Her large bland face, with its prim, rosebud mouth, reminded Pelham of the description of the Mona Lisa as looking as if she had just dined off her husband, Mildred, however, did not even smile.

"Sherrington has a rather in-

teresting theory about the satellites," Pelham told her. "I'd hoped we might see him so that he could explain it again. I think you'd be amused to hear it, Mildred. He's working on IRM's at present—"

"On what?" The group of people behind them had turned up the volume of their radio and the commentary, of the final countdown at Cape Canaveral, boomed into the air over their heads.

Pelham said: "IRM's—innate releasing mechanisms. I've described them to you before, they're inherited reflexes—" He stopped, watching his wife impatiently.

Mildred had turned on him the dead stare with which she surveyed the remainder of the people on the beach. Testily Pelham snapped: "Mildred, I'm trying to explain Sherrington's theory about the satellites!"

Undeterred, Mildred shook her head. "Roger, it's too noisy here, I can't possibly listen. And to Sherrington's theories less than to anyone else's."

A LMOST imperceptibly, another wave of restless activity was sweeping along the beach. Perhaps in response to the final digital climax of the commentators at Cape Canaveral, people were sitting up and dusting the coarse sand from each other's backs. Pelham watched the sun-

light flickering off the chromium radio sets and diamante sunglasses as the entire beach swayed and surged. The noise had fallen appreciably, letting through the sound of the wurlitzer at the fun-fair. Everywhere there was the same expectant stirring. To Pelham, his eyes half-closed in the glare, the beach seemed like an immense pit of seething white snakes.

Somewhere, a woman's voice shouted. Pelham sat forward, searching the rows of faces masked by sunglasses. There was a sharp edge to the air, an unpleasant and almost sinister implication of violence hidden below the orderly surface.

Gradually, however, the activity subsided. The great throng relaxed and reclined again, Greasily, the water lapped at the supine feet of the people lying by the edge of the sea. Propelled by one of the off-shore swells, a little slack air moved over the beach, carrying with it the sweet odor of sweat and sun-tan lotion. Averting his face, Pelham felt a spasm of nausea contract his gullet. Without doubt, he reflected. homo sapiens en masse presented a more unsavory spectacle than almost any other species of animal. A corral of horses or steers conveyed an impression of powerful nervous grace, but this mass of articulated albino flesh sprawled on the beach resembled the diseased anatomical fantasy of a surrealist painter. Why had all these people congregated there? The weather reports that morning had not been especially propitious. Most of the announcements were devoted to the news of the imminent satellite launching, the last stage of the worldwide communications network which would now provide every square foot of the globe with a straight-line visual contact with one or other of the score of satellites in orbit. Perhaps the final sealing of this now inescapable aerial canopy had prompted evervone to seek out the nearest beach and perform a symbolic act of self-exposure as a last gesture of surrender.

UNEASILY, Pelham moved aware of the edge of the metal table cutting into his elbows. The cheap slatted seat was painfully uncomfortable, and his whole body seemed enclosed in an iron maiden of spikes and clamps. Again a curious premonition of some appalling act of violence stirred through his mind, and he looked up at the sky, almost expecting an airliner to plunge from the distant haze and disintegrate on the crowded beach in front of him.

To Mildred he remarked: "It's remarkable how popular sunbathing can become. It was a major

social problem in Australia before the second World War." Mildred's eyes flickered up-

wards from her book, "There was probably nothing else to do."

"That's just the point. As long as people are prepared to spend their entire time sprawled on a beach there's little hope of ever building up any other pastimes. Sunbathing is anti-social because it's an entirely passive pursuit. He dropped his voice when he noticed the people sitting around him glancing over their shoulders, ears drawn to his high precise diction. "On the other hand, it does bring people together. In the nude, or the near-nude, the shop-girl and the duchess are virtually indistinguishable." "Are they?"

Pelham shrugged, "You know what I mean. But I think the psychological role of the beach is much more interesting. It probably represents a return to the archaeopsychic past, a sort of neuronic equivalent of the racial birthplace. The tide-line is a particularly significant area, a penumbral zone that is both of the sea and above it, forever half-immersed in the great time-womb. If you accept the sea as an image of the unconscious, then this mass beachward urge might be seen as an attempt to escape from the narrow existential role of ordinary life and return to the great universal time-sea-"

"Roger, please!" Mildred looked away wearily. "You sound like Charles Sherrington."

Pelham stared out to sea again. Below him, a radio commentator announced the position and speed of the successfully launched satellite, and its pathway around the globe, Idly, Pelham calculated that it would take some fifteen minutes to reach them, almost exactly at half past three. Of course it would not be visible from the beach, although Sherrington's recent work on the perception of infrared radiation suggested some of the infrared light reflected from the sun might be perceived subliminally by their retinas.

REFLECTING on the opportu-nities this offered to a commercial or political demagogue. Pelham listened to the radio on the sand below, when a long white arm reached out and switched it off. The possessor of the arm, a plump white-skinned girl with the face of a placid madonna, her round cheeks framed by ringlets of black hair, rolled over on to her back, disengaging herself from her companions, and for a moment she and Pelham exchanged glances. He assumed that she had deliberately switched off the radio to prevent him hearing the commentary, and then realized that in fact the girl had been listening to his voice and hoped that he would resume his monologue.

Flattered. Pelham studied the girl's round serious face, and her mature but child-like figure stretched out almost as close to him, and as naked, as she would have been had they shared a bed. Her frank, adolescent but curiously tolerant expression barely changed, and Pelham turned away, unwilling to accept its implications, realizing with a pang the profound extent of his resignation to Mildred, and the now unbreachable insulation this provided against any new or real experience in his life. For ten years the thousand cautions and compromises accepted each day to make existence tolerable had steadily secreted their numbing anodynes, and what remained of his original personality, with all its possibilities, was embalmed like a specimen in a jar. Once he would have despised himself for accepting his situation so passively, but he was now beyond any real self-judgment, for no criteria were valid by which to assess himself, a state of gracelessness far more abject than that of the vulgar, stupid herd on the beach around him.

"Something's in the water."
Mildred pointed along the shore.
"Over there."

PELHAM followed her raised arm. Two hundred yards away a small crowd had gathered at the waters edge, the sluggish waves

breaking at their feet as they watched some activity in the shallows. Many of the people had raised newspapers to shield their heads, and the older women in the group held their skirts between their knees.
"I can't see anything." Pelham

rubbed his chin, distracted by a bearded man on the edge of the promenade above him, a face not Sherrington's but remarkably like it. "There seems to be no danger, anyway. Some unusual sea-fish may have been cast ashore."

On the terrace, and below on the beach, everyone was waiting for something to happen, heads craned forward expectantly. As the radios were turned down, so that any sounds from the distant tableau might be heard, a wave of silence passed along the beach like an immense darkening cloud shutting off the sunlight. The almost complete absence of noise and movement, after the long hours of festering motion, seemed strange and uncanny, focussing an intense atmosphere of selfawareness upon the thousands of watching figures.

remained where they stood, even the small children staring placidly at whatever held the attention of their parents. For the first time a narrow section of the beach was visible, a clutter of radios and beach equipment half-

The group by the water's edge

buried in the sand like discarded metallic refuse. Gradually the new arrivals pressing down from the promenade occupied the empty places, a maneuver carried out without any reaction from the troupe by the tide-line. To Pelham they seemed like a family of penitent pligrims who had travelled some enormous distance and were now standing beside the sacred waters, waiting patiently for its revivifying powers to restore them.

"What is going on?" Pelham asked, when after several minutes there was no indication of movement from the water-side group. He noticed that they formed a straight line, following the shore, rather than an arc. "They're not watching anything at all."

THE off-shore haze was now Jonly five hundred yards away, obscurring the contours of the huge swells. Completely opaque, the water looked like warm oil, a few wavelets now and then dissolving into greasy bubbles as they expired limply on the sand, intermingled with bits of refuse and old cigarette cartons. Nudging the shore like this, the sea resembled an enormous pelagic beast roused from its depths and

beast roused from its depths and blindly groping at the sand. "Mildred, I'm going down to the water for a moment." Pelham stood up. "There's something curious—" He broke off, pointing to the beach on the other side of the terrace. "Look! There's another group. What on earth—?"

Again, as everyone watched, this second body of spectators formed by the water's edge seventy-five yards from the terrace. Altogether some two hundred people were silently assembling along the shore-line, gazing out across the sea in front of them. Pelham found himself cracking his knuckles, then clasped the rail with both hands, as much to restrain himself from joining them. Only the congestion on the beach held him back.

This time the interest of the crowd passed in a few moments, and the murmur of background noise resumed.

"Heavens knows what they're doing." Mildred turned her back on the group. "There are more of them over there. They must be waiting for something."

waiting for something."
Sure enough, half a dozen similar groups were now forming by
the water's edge, at almost regular one hundred yard intervals.
Pelham scanned the far ends of
the bay for any signs of a motor
boat. He glanced at his watch. It
was nearly 3:30. "They can't be
waiting for anything," he said,
trying to control his nervousness.
Below the table his feet twitched
a restless tattoo, gripping for
purchase on the sandy cement. "The only thing expected is the satellite, and no-one will see that anyway. There must be something in the water." At the mention of the satellite he remembered Sherrington again. "Mildred, don't you feel—"

Before he could continue the man behind him stood up with a curious lurch, as if hoping to reach the rail, and tipped the sharp edge of his seat into Pelham's back. For a moment, as he struggled to steady the man, Pelham was enveloped in a rancid smell of sweat and stale beer. He saw the glazed focus in the other's eyes, his rough unshawed chin and open mouth like a muzzle, pointing with a sort of impulsive appetite towards the sea. "The satellite" Freeine him-

self, Pelham er: Freeing minself, Pelham eraned upwards at the sky. A pale impassive blue, it was clear of both aircraft and birds—although they had seen gulls twenty miles inland that morning, as if a storm had been anticipated. As the glare stung his eyes, points of retinal light began to are and swerve across the sky in epileptic orbits. One of these, however, apparently emerging from the western horizon, was moving steadily across the edge of his field of vision, boring dimly towards him.

A ROUND them, people began to stand up, and chairs scraped and dragged across the

floor. Several bottles toppled from one of the tables and smashed on the concrete.

"Mildred!"

Below them, in a huge disorganized melée extending as far as the eye could see, people were climbing slowly to their feet. The diffused murmur of the beach had given way to a more urgent, harsher sound, echoing overhead from either end of the bay like the migrating call of some vast herd of animals. The whole beach seemed to writhe and stir with activity, the only motionless figures those of the people standing by the water. These now formed a continuous palisade along the shore, shutting off the sea. More and more people continually joined their ranks, and in places the line was nearly ten deep.

Everyone on the terrace was now standing. The crowds already on the beach were being driven forward by the pressure of new arrivals from the promenade, and the party below their table had been swept a further twenty yards towards the sea.

"Mildred, can you see Sherrington anywhere?" Confirming from her wrist-watch that it was exactly 3:30, Pelham pulled her shoulder, trying to hold her attention. Mildred returned what was almost a vacant stare, an expression of glazed incomprehension. "Mildred! We've got to get away from here!" Hoarsely, he shouted: "Sherrington's convinced we can see some of the infrared light shining from the satellites, they may form a pattern setting off IRM's laid down millions of years ago when other space vehicles were circling the earth. Mildred—!"

HELPLESSLY, they were liftpressed against the rail. A huge concourse of people was moving down the beach, and soon the entire five-mile-long slope was packed with standing figures. Noone was talking, and everywhere there was the same expression. self-immersed and preoccupied, like that on the faces of a crowd leaving a stadium. Behind them the great wheel of the fairground was rotating slowly, but the gondolas were empty, and Pelham had a sudden vision of the deserted fun-fair only a hundred vards from the multitude on the beach, its roundabouts revolving among the empty sideshows.

Quickly he helped Mildred over the edge of the rail, then jumped down on to the sand, hoping to work their way back to the promenade. As they stepped around the corner, however, the crowd advancing down the beach carried them back, tripping over the abandoned radios in the sand. Still together, they found their them ceased. Steadying himself, Pelham continued: ". . Sherrington thinks Cro-Magnon Man was driven frantic by panic, like the Gadarene swine—most of the bone-beds have been found under lake shores. The reflex may be too strong—" He broke off. The noise had suddenly subsid-

Ane noise had suddenly subset, as the immense congregation, now packing every available square foot of the beach, stood silently facing the water. Pelham turned towards the sea, when the haze, only fifty yards away, edged in great clouds towards the beach. The forward line of the crowd, their heads bowed slightly, stared passively at the gathering billows. The surface of the water glowed with an intense luminous light, vibrant and spectral, and

the air over the beach, grey by comparison, made the lines of motionless figures loom like tombstones.

Obliquely in front of Pelham, twenty yards away in the front rank, stood a tall man with a quiet, meditative expression, his beard and high temples identifying him without doubt.

"Sherrington!" Pelham started to shout. Involuntarily he looked upwards to the sky, and felt a blinding speck of light singe his retinas. In the background the music of

the fun-fair revolved insanely in the empty air.

Then, with a galvanic surge,

everyone on the beach began to walk forward into the water.

....

Chicago 5, Illinois

# SPECIAL INTRODUCTORY OFFER

Send me the next 12 issues of AMAZING at the \$2.99.	Special Introductory Rate of only
<ul> <li>My payment of \$2.99 is enclosed.</li> <li>I'll pay when billed.</li> </ul>	NOTE: LONG-TERM OFFER FOR EXTRA SAVINGS!
NAME	24 issues only \$5.75
ADDRESS	□ Payment enclosed.
	☐ Bill me later.

(Additional postage for addresses not in U. S.: 50¢ per vear for Canada and Pan American countries; \$1 per year for all other foreign.)



# STAR CHAMBER

By H. B. FYFE

There were no courts on the isolated world.

But there was a Judge.

 $A^{\mathrm{T}}$  the roar of landing rockets, Quasmin's first impulse was to dash out to the hilltop to scan the skies.

When he left his shack, however, he did so cautiously, carrying a small telescope salvaged from the crack-up of his own ship. This planet was so far beyond the Terran sphere of exploration that he feared the newcomers might not be human.

He was surprised to sight the spaceship settling about half a mile away, in the vicinity of the wreck. The lines seemed to be Terran.

"They picked that spot on purpose," he muttered. "Couldn't be somebody after me, could it?"

There was no lack of good reason for the law to be after him. In the first place, the battered hull out there had not belonged to him. In the second, the authorities might be trying to find out what had become of the original crew. Quasmin could not answer that even if he wanted to—a

corpse was difficult to locate in interstellar space.

He took advantage of the cooling period after the ship had touched down to make his way through the scrubby growth that resembled a forest except for the purplish color of the drooping fronds. He found a good spy point on a low hill and settled down to watch.

In due time, the airlock within Quasmin's view opened. A single-space-suited figure climbed clumsily down the ladder, paused to glance about, and walked a circuit of the ship as if to survey the terrain.

Apparently deciding that nothing dangerous flew or crept in the
vicinity, the spacer returned to
the base of the ladder to remove
his suit. He dropped it there,
hitched at his belt—suggesting
to Quasmin the weight of a
weapon—and began to strol
across the turf of springy creepers toward the wreck. Quasmin
followed as sneakliv as he could.

Passing the strange ship, some instinct told him that it was now unoccupied. The whole attitude of the spacer had suggested a man as much alone as Quasmin himself. The latter temporarily banhodned his skulking pace to walk boldly where he might be seen by any crew members on watch. No activity resulted. Keening one eve on the distant

Keeping one eye on the distant figure, Quasmin moved toward the spacesuit at the foot of the ladder. Just as he was about to reach out for it, the air took on the resiliency of sponge-covered springs and thrust his outstretched hand right back at him. "Force shield!" he growled.

"Damn! Probably set to his voice or some such code. Well, I can't get closer, but it proves he must be alone."

He squinted at the nametape on the breast of the spacesuit and read, "J. Trolla."

Then he hurried after the spacer, who was just disappearing behind a clump of shrubbery.

HE could not decide later just when Trolla had in some fashion become aware of him. Quasmin could remember no careless move that might have given him away, nor did he think it likely that he was confronted by a practiced telepath. Such people existed, but they were not normally permitted to risk heir unique talents fifting about the

unexplored depths of interstellar space. Quasmin blamed it on natural animal instinct.

If he could have seen Trolla during the latter's inspection of the wrecked ship's interior, he would have worried even more. It was no idle poking about for possible salvage. The spacer spent over an hour examining those compartments accessible without the use of a torch to burn away crumpled metal and plastic bulkheads. He displayed unusual interest in things of obscure value, such as articles of clothing and empty plastic crates that had once held food supplies. He also talked a good deal to

himself in a low voice, but the battered hull concealed this from the man lurking outside.

That there was a watcher there, Trolla stopped doubting when he mentally summed up the amount of minor equipment obviously removed from the ship since the crash. He decided it was not necessary to penetrate the broken-up drive sections in what had been the lower levels before the hull had toppled over. The scavenging looked like the work of one individual unable to salvage any of the heavier machinery.

"Just took some things to make himself more comfortable," he murmured. "A few instruments, food, medicines, self-powered appliances, and the like." He considered returning to his own ship for equipment with which to make a real check that would include search for and analysis of fingerprints, hair, perspiration traces . . and perhaps even blood samples. "Why waste time?" he asked

himself. "It has to be Quasmin, and there's not much chance of finding anyone with him. Why not just see where he's holed up—before he starts running again and makes it a long job?"

Emerging through a rent in the hull, he was again struck by the sensation of being watched. He could not control a slight motion of one hand to his belt for the reassuring touch of his gas gun. With it, he could fill the air around any attacker with a scattering of tiny, anesthetic pellets while the personal force shield he wore would protect him from any hostile return. Though assuming that Quasmin would be armed, he did not think the man could have obtained a shield. None had been reported missing by any law-enforcement agency within imaginable range of this untouched planet.

TROLLA walked about the wreck twice before he spotted the dim trail that revealed infrequent visits to the place. Cautiously, he followed it along the edge of the taller, purplish growth that almost boasted the

dimensions of trees, wondering if he would presently detect sounds of someone trailing him.

By the time he sighted the crude shack from a low hilltop, he believed he had heard sounds three or four times. They might have been indications of native life forms. He forgot about them as he examined the refuge that Quasmin had built. The hut was crookedly assem-

The nut was crookedy assembled of bulkhead sections ripped from the wreck. There had evidently been batteries available to power simple tools, for lengths of bent plastic were bolted around the corners, and two windows had been cut in the walls. A mound of dirt had been heaped up against one of the sides.

"Digging in for the winter season," muttered Trolla, nodding. "Yes, he'll need some insulation."

He delayed looking inside, lest he provoke some reaction before learning all that he wished. Instead, he walked on past the shack, and thus came upon a small stream and an almost pitiful attempt at building a waterwheel.

"Must work, though," he told himself. "He must have been using it to recharge batteries for the distress calls he has the nerve to keep broadcasting. Wonder if he knows they don't have much effect over fifty billion miles?"

He crossed the brook and

looked over the two small fields beyond. They had been cleared and roughly ploughed by some laborious means he preferred not to contemplate. It was standard procedure for spaceships to carry planting supplies for just such situations, and he had to approve the beginnings made by Quasmin, Retracing his steps to the shack, he found the opportunity to say so.

"Oh, there you are!" said Quasmin, "I was looking out near your ship to see who landed. Is there just you?"

Trolla savored the glint of animal cunning not quite disguised in the other's glance. He decided to quash the verbal sparring at the outset.

"How many did you expect, Quasmin?" he inquired pleasantly, "My department has to police three planetary systems, spread widely along this frontier. We can't afford fuel and rations to send a brass band after you!"

The shock was good for three or four minutes of bristling silence.

Twice, Quasmin opened his mouth as if to deny his identity. but thought better of it. His scowl faded into an expression of studied insolence.

"So you're a cop," he sneered. "What d'va think va gonna do. way out here where va can hardly even call in to headquarters?" "That depends," said Trolla,

"And a shield too?"

eveing him analytically, "To be perfectly frank, I can't call headquarters. Don't you know how far out we are from the outmost little observation post of humanity? Or did you just give up all astrogation whenever you got rid of those crewmen you kidnapped?" "How can you prove I got rid

of them?" demanded Quasmin with the same sneer.

"I don't even want to bother. There are eleven murder charges hanging over you besides drugsmuggling and that rape on Vammu IV; and even I can hardly understand that last. Those people are only semi-humanoid!"

Quasmin grinned. Trolla felt vaguely sickened at the sudden realization that his momentary betrayal of a sense of decency was taken as a sign of timidity.

The other turned aside and took a few slow steps to where an empty plastic crate had been braced against a rock for a seat. He sat down and leaned his shoulders against the rock, but with an attitude of alertness. It was the first physical move made by either since Trolla had walked around the corner of the hut. "Maybe va think you'll arrest

me," he said, watching Trolla carefully. "Maybe ya think I don't pack the same handful of sleep you do!"

QUASMIN'S eyes narrowed at that. He seemed to estimate his chances of calling a bluff, then relaxed slightly, accepting the truth.

"Suppose we shoot it out, then," he suggested. "You might kill me at this range, with an overdose before the pellets scatter. Ya get too much gas in me, an' you'll be up for murder too."

an' you'll be up for murder too."
"That would be your mistake."

said Trolla.

"Oh, you might get off," said Quasmin judiclously. "But there lots of people will still say it's murder. You bein' a cop makes no difference. Civilization bein' what it is, the law's gotta protect me tool I gotta right to be helped more than average, because I'm in more than average trouble right?"

Trolla nodded, but less in agreement than confirming some suspicion of his own.

"And you'd refuse to come with me even if I ordered you?"

"What a dummy ya'd be to try an' make me!" grunted Quasmin. "You gotta sleep sometime—an' you'd sure as hell wake up the

wrong side of the airlock!"

He grinned at the other with
his ugly expression of petty

triumph and added, "Ya got nerve to try it after a fair warning?" "Perhaps not," admitted Trolla.

"Huh! Ya got some sense after all. Why don't ya just go away an' let me alone? Nobody ever

gave your bunch jurisdiction out here. I bet this planet was never even reported, was it?"

"It's not on record," Trolla confirmed. "As far as I know, the only humans to reach it are you and I—and I almost turned back. How you picked it up, I don't know, but I was playing a hunch when I picked up your distress call."

Quasmin leaned back in more relaxed fashion.

"Well, ya got a problem," he grinned. "I ain't leavin' here with ya, an' what chance have ya got of bringin' a judge an' jury out here? I gotta right to a fair trial with legal an' psychiatric advice!"

Trolla took two steps to lean his shoulder against a corner of the hut. The ill-constructed joint sagged under his weight. "Didn't it occur to you that

you're having your trial right now?" he asked.

That reached him, he thought, with a certain ironic satisfaction. Quasmin glared at him in outraged disbelief. He spat on the ground and demanded. "What're

ya doin'? Settin' yourself up as judge an' jury all by yourself?" "And executioner, if need be," agreed Trolla.

He watched in silence as the other's jaw hung slackly, then has Quasmin slowly turned red with temper.

"You . . . you . . . why, ya

119

dirty cop, ya! That's against every law that ever was. They ... they wouldn't let ya!"

"There's no other way. As you said, they can't send out people to hold a trial here. It isn't safe to take you back alone. They couldn't spare more officers to come with me on the off chance you'd be found way out here."

"No matter how far it is, you ain't got any right to do that!" Quasmin's right hand was be-

neath his shirt but Trolla, secure within his shield, ignored that.

"Well, then," he said, "if mere distance doesn't put this planet beyond human law, the same goes for you."

"I still have a fair trial comin' then!"

"You're having it right now," Trolla told him.

"Like hell!" Quasmin snarled. He was on his feet now, teetering on his toes. "I know my rights. I oughta be gettin' rescue an' rehabilitation help. You can't do anything but kill me. You got no right!"

Trolla pushed off from the corner of the shack with a hunch of his shoulder. He took a few steps toward the trail out of the clearing, then hesitated.

"You've had a lot of rehabilitation work, haven't you?" he pointed out. "I had plenty of time to study your records, on the way out from Blauchen III." "Ya can't talk me into comin' in for more psych treatments!" growled Quasmin. "I had enough of those guys, since I was a kid." "Yes, you were a little too

"Yes, you were a little too smart for them," agreed Trolla. 
"The most they ever managed was a good, thorough conditioning against suicide, after you put on a psycho act to break up the second trial for murder."

Quasmin grinned again.

"I sure suckered them that time," he recalled with gloating. "The treatment didn't hurt any 'cause I never did have any idea of killin' myself; an' it got me outa the other mess till I could make a break."

"It won't get you out of this one."

Quasmin's grin left him.
"Made up your mind already?"
he demanded, half drawing a gas
pistol of his own.

"Not yet," said Trolla. "I'll go back to my ship to think it over."

HE walked away, though keeping a prudent watch over his
shoulder until he was a hundred
meters distant. Even after that,
he turned around occasionally.
This made it difficult for Quasmin to follow him, but the outlaw
managed to be in position to observe Trolla's arrival at his ship.

He spied as the detective recovered his spacesuit and climbed the ladder to the airlock. When there appeared to be no likelihood of his emerging for some time, Quasmin scuttled back to his hut. "No sense bein' here if he

"No sense bein' here if he comes lookin' for me with his gun an' shield," he growled to himself. "Maybe I bluffed him, an' maybe I didn't."

He threw together a small bundle of rations and rolled it with a water bottle in a blanket. As he did so, he muttered a stream of curses.

"He's got no right to try anythin," he reassured himself.
"The law says I gotta have a chance at rehabilitation whether I co-operate or not. I didn't make up the law, but I can use it as much as he can. He wouldn't dare overgas me!"

His anger helped him start out at a brisk pace. In less than three hours, he reached an area of rough, cliff-broken hills where there were caves that would take Trolla weeks to check. There he concealed himself for the night.

Sometime during the darkness, a distant rumble awakened him. Suspiciously, Quasmin poked his head out of the cave in which he had been sleeping. He was just in time to see the flare of receiver in the starry sky.

just in time to see the flare of rockets in the starry sky. "He backed down!" was his triumphant conclusion.

He watched the flaring light until he was satisfied that Trolla was making for space and not for another landing place. Then he returned to sleep. Just to be sure, Quasmin remained in the hills two more days, until his supplies ran low and he thought it might be comfortable to return to the hut. He made his way back warily, lest Trolla should have left some sort of trap.

At the shack, he found nothing but his own things, so he hiked through the purplish shrubbery to the landing spot. To his surprise, he discovered that Trolla had left a number of crates behind. He sat down to think that over

When no explanation occurred to him, he went to the wreck of his own ship. In the partly stripped control room were a few instruments that still functioned when he hooked up batteries to power them.

"Might be smart to see if he's in orbit," he muttered. "Maybe he thinks he can soften me up by leaving presents."

leaving presents."

Emerging an hour later, he looked puzzled. As much by luck as by skill and accuracy, he had succeeded in picking up Trolla's ship on the rangefinder. The instrument was not meant to operate efficiently through an atmosphere and Quasmin was no expert in its use; but it definitely showed Trolla was heading outsystem.

"Well, then, I might as well see if he left a bomb," decided Quasmin. He approached the crates close enough to read the stenciled labels. Scowling in bewilderment, he set about opening them. Just as the lettering indicated, he found an assortment of electric motors, equipment for building a new generator that could be powered by his waterwheel, and even a supply of glow-panels for light if he should get an electrical system into operation.

There was also a chest of tools and parts, and several boxes of grain and vegetable seeds. The prize of all was a small, three-wheeled, battery-powered vehicle that looked just large enough to pull a homemade plow.

The man sat on an open crate and burst into hysterical laughter.

"All a bluff!" he chortled. "I knew he didn't dare do anything!"

It was after he staggered to his feet to haul the little machine from its crate that he found Trolla's note attached to the handlebar. Dear Quasmin, it said. As you tried to point out, there is some argument whether a society has any moral right to punish a criminal or merely an obligation to help him heal himself.

Quasmin roared with laughter. He looked up at the clear sky.

"That's right, Trolla! I'm sick
-an' don't you forget it!"

On the other hand, he read on, an individual oves support to the society that protects his rights. I think a breach of the contract by one party nullifies it for the other too. Think that over—Trolla.

Quasmin scowled at the words, then at the sky, and finally at the toels and materials that would help maintain him on this strange planet for many years.

"Years and years and years," he muttered, glancing about at the hanging, purplish fronds in the silent background.

A stunned expression crept over his face, as he realized what kind of sentence had been passed upon him.

THE END





By S. E. COTTS

Time Waits for Winthrop and four other short novels from Galaxy. Edited by Frederik Pohl. 336 pp. Doubleday & Company, Inc. \$3.95.

This is one of the best allaround collections to cross my desk all year, and it deserves all the praise it is bound to collect. The authors and their respective stories are William Tenn, who wrote the title novelette: F. L. Wallace, Accidental Flight: Theodore Sturgeon, To Mary Medusa: Damon Knight, Natural State: and Isaac Asimov, Galley Slave. There is no particular common thread between these stories; if anything, they are representative of the wide variety of categories within science fiction.

William Tenn's Time Waits for Winthrop is primarily a time machine story, not a tense, nalibiting one but a wonderfully comic one. Five twentieth-century Americans are picked to change places for two weeks with the same number of Americans from the 25th Century. But we don't find any of the scientific selection policies we might expect utilized in choosing them. They are chosen simply because they correspond in structure and mass to the five from the later century. Result: As heterogeneous a collection of ages and temperaments as it's possible to find. The story follows the adventures of the 20th-Century five as they discover to their horror that one of their number, stubborn old Winthrop who "never had it so good," refuses to return to his own time. The four other 20th Century-ites try desperately to make him change his mind, and before the story is up each has had an unforgettable adventure. Perhaps the best one is the nearfarce scene that one man. Mr. Mead, goes through as he is forced to take part in a Shriek exercise while on the trail of a

government official who may be able to help them with Winthrop.

F. L. Wallace's contribution is a different branch of the field completely. It deals with life on an asteroid. This asteroid is unique in the entire galaxy because it is a hospital. Not an ordinary hospital where the patient returns to home and family after a cure. This asteroid is listed on the charts as Handicap Haven and the men and women on it must stay the rest of their lives. Their distressing physical handicaps would otherwise be too upsetting to the "normal" people on the regular planets. The cripples of Handicap Haven can accept this, but what they cannot accept is not being of any use. They had, what seemed to them, a workable plan for manning the first spaceship to go to Alpha Centauri, but their plan has been turned down. How they strive and scheme to put this plan into effect, despite the authorities. forms the basis for an unusual and interesting story.

Theodore Sturgeon's To Marry Medisac was already reviewed here a few years aso under the title The Cosmic Rape. At that time I thought it a good story, and I still do. The only trouble is an expanded version of To Marry Medisac, and since I happened to read the more complete version first, the present tale seems

emasculated and fragmentary. It has the essential ideas, but it is not filled in at all. Briefly, the Medusa is another manifestation of an idea that often appears in Sturgeon stories in different guises-the group mind or, as he calls it here, the hive mind, In the beginning, however, the hive mind of the Medusa is not a blessing so much as a threat, and its first human carrier was not a person of nobility or intelligence. but a cringing bum. As the mind spreads and spreads, the rest of humanity also starts forming a hive mind in defense. As I said. this version has a few sparks. but really interested readers should look up the other version. Damon Knight's story brings

us still a different subdivision. It takes place in the United States and is an updated version of the city mouse and the country mouse children's tale. Alvah Gustad, a realie actor in New York. is chosen by the city government to take a dangerous trip to make contact with the Muckfeet (as the country dwellers are called). The cities can no longer lick the Muckfeet in numbers, but New York decides to try a propaganda campaign to convert them to city ways, through fostering in them a need for and reliance upon the newest, latest city gadgets. This is a very entertaining tale, written with Knight's distinctive touch. And along the way, under

the surface of the chuckles, are some gentle but pointed digs at misplaced patriotism.

Isaac Asimov's Galley Slave is certainly the title with the cleverest double meaning in all of science fiction. I bet that nine of every ten readers will immediately think of some poor soul, chained to the oars of a war canoe, or some similar idea. In reality, it refers to a robot who reads galley proofs, as well as performing other time-saving labor for the faculty of Northeastern University. The story is in the form of a trial in which the plaintiff is a sociology professor. Dr. Simon Ninheimer, and the defendant is the United States Robot and Mechanical Men. Inc. The verdict turns on the by now famous Three Laws of Positronic Robots. To say any more would give away the fun.

R Is for Rocket. By Ray Bradbury. 233 pp. Doubleday & Company. \$2.95.

This is a collection of seventeen stories by the prolific Mr. Bradbury, written between 1943 and 1957. As the title hints, most of the stories deal with rockets or space; but this is the only thing consistent about them. For the rest, they differ as to length (from the two-page "The Gift" to the fifty-page "Frost and genfre"), subject, quality and genre. This last fact is worthy of

mention since the book contains a larger number of straight science fiction stories than the fantasy writing with which he is more commonly identified. In so far as quality goes, the volume has a few of his very finest along with some real duds. And when Mr. Bradbury fails he does so in a very distinctive fashion. The bloopers of other authors are sometimes dull or sometimes inconsistent or too morbid or unscientific or any one of a number of evils. But what makes Mr. Brabury's bad ones so noteable is almost always a small or trite idea coupled with an oversentimental treatment. The marriage of these elements is enough to cause even the hardened reader active embarrassment. Mr. Bradbury has never had any trouble in writing "out" or projecting his feelings and so he should be on special guard against excess. The writer with an intellectual approach could learn some things about writing through Mr. Bradbury. But the writer with the more emotional approach (which Mr. Bradbury has) should repeatedly understate and declare an open season on similes and metaphors. To illustrate these statements.

To illustrate these statements, here is a look at some specific stories. When I spoke of some of his finest, I was referring to a story like "A Sound of Thunder." This suspense tale, almost a clas-

sic by now, is about a dinosaurhunting safari in the past. Another excellent example of vintage Bradbury is the long story "Frost and Fire." Though sixteen years have elapsed since it was written, it is still as interesting and fresh as one would want. It is the story of accelerated growth patterns on a strange planet. Here on this world, the entire human life span is but eight days. The inhabitants cram every possible minute of this brief existence with pleasure, and very few give any thought to trying to improve their lot, until a boy named Sim is born.

On the debit side, stories such as "The Gift," about Christmas aboard a rocket, and "The Strawberry Window," showing the need for old familiar things in a new environment, are prime examples of slush. There are other stories which threaten to go in the same direction, notably "The Rocket" and "The Sound of Summer Running." In the first, a poor Italian junk man, father of five. tries to make the difficult decision about which member of the family should have a trip on the Mars rocket (there is only money for one). In the second, all that really happens is a boy's getting his new pair of summer sneakers. I felt sure when I started them that both these stories were headed in the same gooev direction as some of their fellow tales. But the artist's instinct which is definitely in Mr. Bradbury (though it sometimes falls into quiescence) clamped down the fron hand of restraint and saved the day.

Tales of Ten Worlds. By Arthur C. Clarke. 245 pp. Harcourt, Brace & World, Inc. \$3.95.

In the space remaining, there is yet another anthology that descrees mention. Most of these fifteen stories by Clarke will probably be familiar to fans who have caught them either in their original magazine format or in one of the "best" anthologies. (Such are the rewards of quality.)

However, the Clarke collection forms a particularly interesting contrast with the Bradbury. since these two writers are as far apart in style as it's possible to be: whereas Bradbury leans toward too much emotion, Clarke tends toward too intellectual an approach. Each writer is most successful when he keeps a firm rein on his natural inclinations. Therefore, some of the most successful stories here are those in which Clarke combines his irrepressible intellect with elements of menace, of nostalgia, or humor, etc. Among these big pluses are "I Remember Babylon," "Summertime on Icarus," and "An Ape Around the House."



Dear Editor: In my last letter to you via the FANTASTIC letter column, I took a stand against the mislabeling of stories, and of Classic Reprints in particular, I have more ammunition for my cause, thoughtfully provided by the November issue of AMAZING. In my letter to FANTASTIC. I went into some detail about its deceptive "Fantasy Classic," and now, I would like to go into some detail about the Classic Reprint, Your policy, with regard to the AMAZING has given me the impression that science fiction is its bread and butter, meat and potatoes etc. Fine. So why did "The Planet of the Double Sun," which I call more fantasy than sf. spoil the menu? Things would have been fine if you had switched the latter and "Planetoid 127".

Next. I had better explain why I consider the Prof. Jameson piece a fantasy, rather than science fiction. The only scientific thing about the story was how the Zoromes got to the planet, and how Jameson got off (and that last bit even stretches of a bit far). The entire mystery of the planet, and Jameson's explanation are what I call fantasy. If you are going to throw fantasy in AMAZING, fine. But please don't call it sf; and if you put sf in FANTASTIC, that's okay too, just don't call it fantasy.

> Douglas Bodkin 24 Mariposa Lane Orinda, Calif.

· But isn't it interesting to the concepts have see how changed through the years? Don't be so category-minded!

Dear Editor:

When I read a science fiction story, I expect the science contained in the story to be ahead of actual present day science, in either development or application. This is one reason why I enjoy reading science fiction.

You can then imagine my surprize (or AMAZEment as you may prefer) to find that you have introduced a new type of sf in your December issue of AMAZING. Science fiction that is behind present day science!..

In the story "Small Voice-Big Man" the author states, on the top of page 62, that the transmitter will make Van Richie look a little fat. With present day scince, this would not be necessary. In the January, 1962, issue of RADIO ELECTRONICS, there is a large article about a self contained and self powered (mercury batteries) FM transmitter which is built into a standard size lavalier mike.

Frank Koempel
215 Arlington Drive
Fords, New Jersey

• We'll take out a subscription for our red-faced non-electronicist author (and staff).

Dear Cele:

December was an unusually good issue. The Schomburg cover was very effective and did much for the appearance of the magazine.

Glad to see Ray Jones in your pages again. His story, "Stay Off the Moon," was science fiction of a type that does not appear in prozines very often, nowadays. He used the idea of a living moon, pure fantasy, to demonstrate and carry his theme. With this, he was able to bring forth a most startlingly true-to-life theme: man's disbellef and rejection of that which he cannot understand. The story illustrated a possible result of this intrinsic

fault. Is it caused by ignorance? At any rate, it makes one think of the possibility that something very much like this might occur should similar circumstances be set up.

As usual, the Moskowitz profile was informative and interesting. This particular one contained facts which came as quite a surprise to me, especially Bloch's background.

I still fall to see the usefulness of Roger Zelazny's writing. It is offbeat, and it is hard to discover exactly what this author is trying to put forth. Certainly his works are meant to stir up thought, they can't be meant for entertainment. What is the public reaction to him?

It was wonderful to see Marion Zimmer Bradley in your pages, and her "Measureless to Man" was thought provoking and faintly reminiscent of Sheckley's early material.

Thanks again for producing the sci fi prozine which has the best outlook for the future. Congrats on Miss Goldsmith's award, and I sincerely hope you get the HUGO next year.

Dave Keil

38 Slocum Crescent Forest Hills 75, N.Y.

 Most readers seem to like Zelazny. But how, in SF, can you draw such a line between thought-provocation and entertainment?



## SHOPPING GUIDE

Classified

Rate: 25¢ per word including name and address. Minimum 10 words. Send orders and remittance to AMAZING STORIES, One Park Avenue. New York 16, New York, Attention Martin Lincoln.

#### AUTHORS

PUBLISH your book! Join our successful untern publishly odvertising promotion, bequiting books. All subjects invited. Send for free approisal on detailed booklet. Carton Press, Dept. C, 84 Fifth Avenue, N.Y.C. 11. AUTHORS Learn how to have your book published, premoted, distributed, Free booklet "ZDV, Vantogs, 120 West 31 St., New York 1.

#### BINOCULARS AND TELESCOPES

SCIENCE BARGAINS—Request Free Glant Catalog "CJ"—144 pages—Astronomical Telescopes, Micrascopes, Lenses, Binoculars, Kits, Parts, War Surplus bargains, Edmund Scientific Co., Barrington, New Jersey.

# FREE Discount Catalogi Camera Adoptor Telescopes, Microscopesi Binoculorsi Adventure Company, Box 2133-R, San Diego 12, Calif. ROOKS AND MACAZINES

FANTASY & SF BOOKS & Mags lowest prices, llst free. Werewalf Bookshop, 7055M Shannon Rood, Verong, Po.

BACK Issue, Science Fiction, Magazines and Books. Packet Editions 5 for \$1.15. Free lists. John E. Koestner, 2124 Rene Ct., Brooklyn 37,

READ America's Amateur Magazines, B for \$1.00. Seth A. Johnson, 339 Stiles St., Youx Hall, N. J.

HORROR Book—"The Detective Is A Monster!" By Jett Mortin. Unusual, foscinating. \$1, Trans-International Publishers, P.O. Box 2942, Poterson, N. J.

BACK Issue Scientifantasy magozines, books. Free cotolog. Gerry do la Ree, 277 Howland, River Edge, N. J.

SPECIALISTS: Science-Fiction, Fantosy, Weird Fiction, Books, Pocketbooks, Lists issued. Stephen's Book Service, 63 Third Avenue, New York 3, N. Y.

BOOKS—All 10¢, 200 titles, all subjects. Catalog free. Cosmar, Clayton, Ga. NAME the book—we'll find it for youl Outof-print book specialists. All subjects. (Title alone is sufficient.) Write—no obligation. Books-On-File, Dept. AMF, Union City, New Jersey.

FREE List. New and used book bargains. Interesting, unusual subjects. Ellison's Bookshelf, Box 384-A, Cushing, Texas.

10 assorted s-f publications Spaceway, Fantasy Book, New Worlds, etc. 600,000 words of exciting science fiction. \$2.00. Crowford, 14351 Alwood, Baldwin Park, Calif.

READ about mons' most thrilling sport. Sky Diver, Box 44, Buena Park, California.

## BUSINESS OPPORTUNITIES

INVESTIGATE Accidents—Earn \$750 to \$1,000 monthly. Man urgently needed. Car furnished. Business expenses poid. No selling. No college education necessary. Pick own job location. Investigate full time. Or earn \$6.44 hour spare time. Write for Free Literoture. No abligation. Universal, CZ-3, 6801 Hillcrest, Dallos 5, Fexos.

ASSEMBLE Artificial Lures at home for stores.
Materials supplied Free. Profitable! Write:
Lures, Fort Walton Beach 1, Florida.

I MADE \$40,000.00 Year by Mail order! Helped

I MADE \$40,000.00 Year by Mail order! Helped others make money! Start with \$10.00—Free Proof. Torrey, Box 3566-N, Oklahoma City 6, Oklahoma.

# EMPLOYMENT INFORMATION

DIRECTORY Reports. Construction, evication, shipping, ciriledis, government, manufacturing, trucking etc. Foreign-Stotstide. Helpful information plus job-gerling lips on preparing application letters. Unconditional month

#### FOR SALE

DRUG SUNDRIES. Complete line of rubber goods. Notionally advertised brands. Vitamins, etc. Write for free catalog. Federal Pharmacal Supply, Inc. Dept. 2D, 6652 North Western Avenue, Chicaga 45, Illinois. LEG IRONS, \$7.95, Handcuffs, \$7.95. Leather Restraints; Fetters; Collector's Specialties. Catalog 50¢. Thomas Ferrick, Box 12F, Newburyport, Mass.

## GOVERNMENT SURPLUS

U.S. Government Surplus—Jeeps, \$26.6.00 cadios, \$2.35 Guns; Typewriters; comeros: tools; thousands of items. Fobulously low surplus prices. Complete information sent immediately. Send \$1.00 tor Surplus, P.O. Box 30312, Dept. R, New Orleans 30, Louisiana.

ana.

JEEPS \$278, Airplanes \$159, Boats \$7.88, Generators \$2.68, Typewriters \$8.79 are typical government surplus sole prices. Buy 9052 locations and procedure only \$1.00, Surplus, Box 177-C33, Abbottstown, Penna.

FREE, Valuable War Surplus Bargain Information. Box 820, Thomasville, Penna.

#### HYPNOTISM

HYPNOTIZE Unnoticed, quickly, effartlessly ar refundl Thousand satisfied \$2. Timner, Box 244, Cedarburg, Wisc. HYPNOTISM Handbook, Van Vogt & Cooke. 270pp of word-for-word instructions. \$4.50. Crawford, 14351 Alwood, Baldwin Park, Calif.

#### INSTRUCTION

FITURE System of Monthemotics—Gueran-teun-5.100. Knowledge, 2900 9th Street, Bock Island 12, Illinois.
EARN While Alsee, hypnotize with your recorder, phonography. Astonishing details, sensational catolog freel Seep-Learning Association, Box 24-2D, Olympia, Washington, EEARN while catego, Remortable, scientific, 22% effective, Details free, ASF Foundation, Box 7021, Dept. e.g., keeington, Kentucky.

### I.O. TESTS

I.Q. Tests. Accurate, inexpensive. Home-administered, professionally interpreted. Research data needed. University Testing Institute, R-27, Box 6744, Stanford, California.

## MISCELLANEOUS

INDEPENDENT Thinkers—Investigate Humanism, the scientific personal philosophyl Free literature. American Humanism Association, Dept. A2, Yellow Springs, Ohio.

#### MOVIE FILMS

MEDICAL FILM—Adults Only. "Childbirth" ane reel 8mm, \$7.50; 16mm, \$14.95. International A, Greenvale L. I., New York. 8mm film traded and bought. Write Jim Romain, 408-51st, Western Springs, Illinois.

### PERSONALS

"UPFIRICS" system of lip culture for this pucked old footing lips. Woodwild lips would fill footing lips. Woodwild lips would lips and the lips and lips and

### STAMPS AND COINS

SMASHING collection free-Includes triongles, early United States, reckets, uports Bests colonies, high value pictorials, etc. Complete collection plus big, litustrated magazine, and free, Send 10y for postage. Grev Stamp Co., Dept. 22, 10 ronto, Canada. Dept. 23, 20 ronto, Canada. Collection is known to the provide state of the provided state of the

## TAPE AND RECORDERS

TAPE Recorders, Hi-Fi Components, Sleep-Learning Equipment, Tapes, Unusual Values. Free Catalog. Dressner, 1523 AM Jericho Take. New Hyde Park 14, N. Y.

#### WANTED TO BUY

PORTABLE Tape Recorder—Quality 4 translator unit complete with microphone, acarbone, reals, tape, and barteries. Send \$29,95, cash, check or money order to William F. Borden, Box 281, Dept. Hl, San Francisco 26, Calif. QUICKSIVER, Platinum, Silver, Gold Ores analyzed. Free circular. Mercury Terminal, Norwood, Massachusetts.

For as little as \$2.50 (25f per word; 10-word minimum) your classified message will be read by more than 50,000 active buyers each month. Test them today! You'll be delighted with the results! For complete details, write:

MARTIN LINCOLN, Classified Advertising Manager
A M A Z I N G

One Park Avenue, New Yark 16, New York



# 164 pages of challenging construction projects!

This handy, compact publication is filled with exciting do-it-yourself projects, detailed charts, circuit diagrams, cutaways and photographs. Included is a special 14-page bonus feature on electronics schools which covers every important aspect of learning and instruction

The 1963 ELECTRONIC EXPERIMENTER'S HANDBOOK is now on sale at your favorite newsstand or electronics parts store. Only \$1.00

